



- **Capital Investment Plan Quarterly Report for period ending June 30, 2022**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during fiscal years 2020/21 and 2021/22. It also provides updates on the status of capital projects and capital expenditures to date, and information regarding service connections and relocations authorized by the General Manager during the reporting period of April to June 2022, the fourth quarter of fiscal year 2021/22, and the final quarter of the fiscal years 2020/21 and 2021/22 biennium.

Purpose

Administrative Code Requirement Section 2720(a)(1): General Manager's Quarterly Reports

Section 2720 of Metropolitan's Administrative Code requires the General Manager to report quarterly to the Engineering and Operations Committee on the Capital Investment Plan.

Sections 4700-4708 of Metropolitan's Administrative Code requires the General Manager to report on service connections approved by the General Manager with the estimated cost and approximate location of each.

Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of \$100,000.

Highlights of progress and major milestones on selected projects are presented in the attached report grouped by CIP program.

Attachments

Capital Investment Plan quarterly report for period ending June 2022



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

CAPITAL INVESTMENT PLAN Quarterly Report

April – June 2022



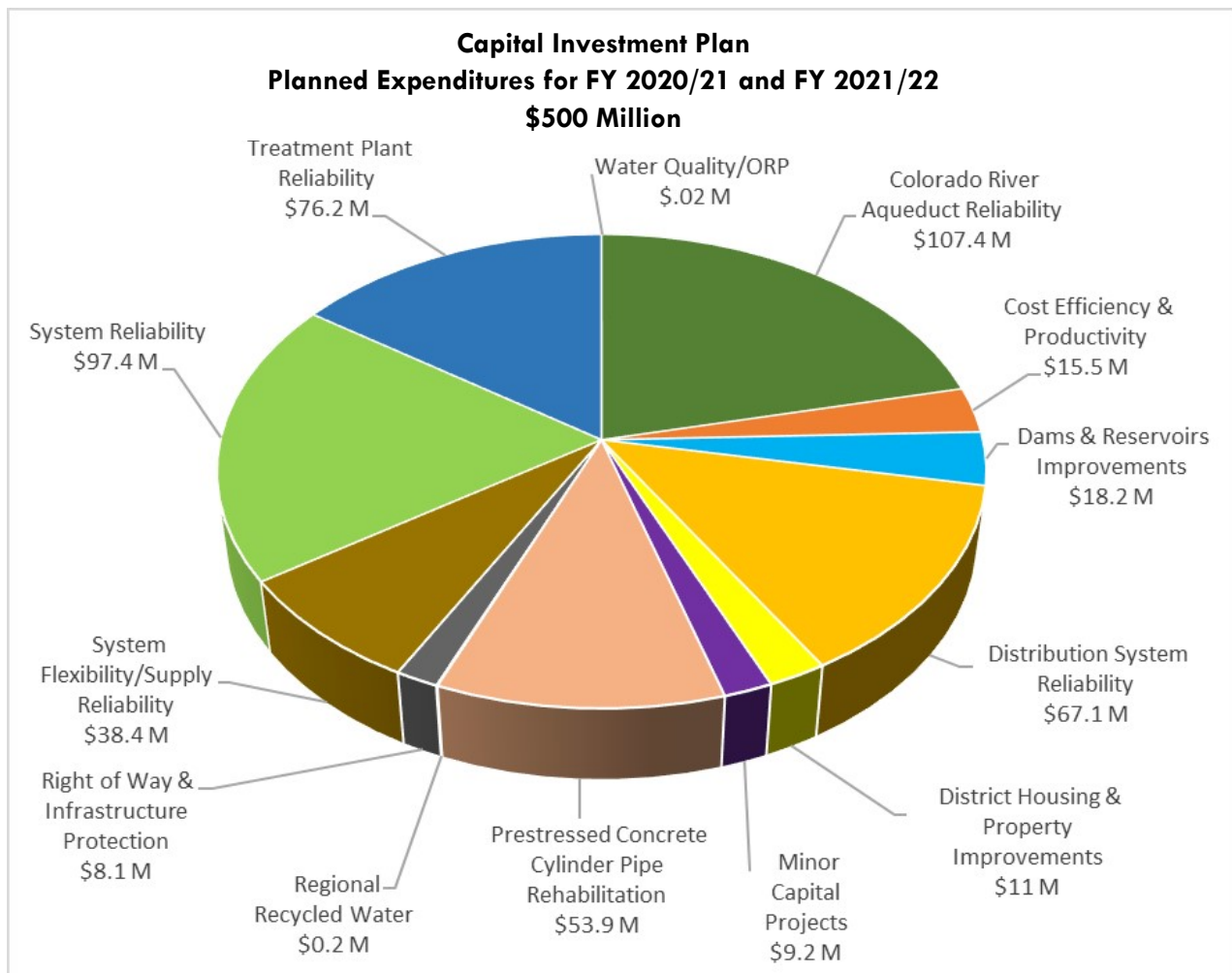
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CAPITAL INVESTMENT PLAN FOR FISCAL YEARS 2020/21 & 2021/22

Metropolitan’s total planned capital expenditures for Fiscal Years (FYs) 2020/21 and 2021/22 was \$500 million. Figure 1 below in relation to their associated programs. In April 2020, the Board appropriated \$500 million and delegated authority to the General Manager, subject to both CEQA requirements and the General Manager’s authority as addressed in Metropolitan’s Administrative Code, to initiate or proceed with work on all planned capital projects identified in the Capital Investment Plan (CIP) for FYs 2020/21 and 2021/22.

Figure 1: CIP for FY 2020/21 and FY 2021/22 by Program



[Cover Photos: (left to right; top to bottom): Skinner Cathodic Protection - drilling of anode well at Site 6; Skinner Facility Area Paving - roller compaction of asphalt paving in Area 9; Casa Loma Siphon Barrel No. 1 Seismic Upgrade - placement of 151-inch welded steel pipe]

FOURTH QUARTER SUMMARY

Biennial expenditures through June 2022 totaled \$458.8 million (details shown in Table 15), and expenditures for the 4th Quarter of Fiscal Year 2021/22, April through June 2022, totaled \$81.9 million for all capital programs.

During the 4th Quarter, board actions heard in open session included ten project-specific actions and one action on the upcoming biennial CIP budget summarized in Table 1 below. These actions awarded eight contracts totaling approximately \$156.1 million, authorized seven new professional/technical services agreements totaling a not-to-exceed amount of approximately \$18.6 million, authorized one construction staging and storage site lease agreement in an amount not-to-exceed approximately \$0.4 million, authorized an increase to two existing agreements totaling a not-to-exceed amount of approximately \$2.3 million, and appropriated \$600 million for projects identified in the CIP Appendix for FYs 2022/23 and 2023/24. Information on the awarded contracts can be found in Table 10 of this report. The table below excludes information on board items heard in closed session.

Table 1: 4th Quarter Board Actions

Month	Board Letter Item No.	Project	Action taken
April	7-4	Mills Plant Control System Upgrade	Authorized an agreement not-to-exceed \$8,500,000 and authorized an increase of \$1,950,000 to an existing agreement
April	7-5	Capital Investment Plan for Fiscal Years 2022/23 and 2023/24	Appropriated \$600 million for projects identified in the CIP for FYs 2022/23 and 2023/24
April	7-6	Orange County Feeder Lining Replacement, Stage 3	Awarded \$17,226,250 construction contract and authorized a construction staging and storage site lease agreement not-to-exceed \$360,000
May	7-3	La Verne Shops Building Completion - Stage 5	Awarded \$18,930,000 construction contract and authorized an agreement not-to-exceed \$650,000
May	7-4	Upgrades at Three Sepulveda Feeder Structures	Awarded \$3,143,592 construction contract
May	7-5	Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	Awarded \$93,840,000 construction contract and authorized an agreement not-to-exceed \$495,000

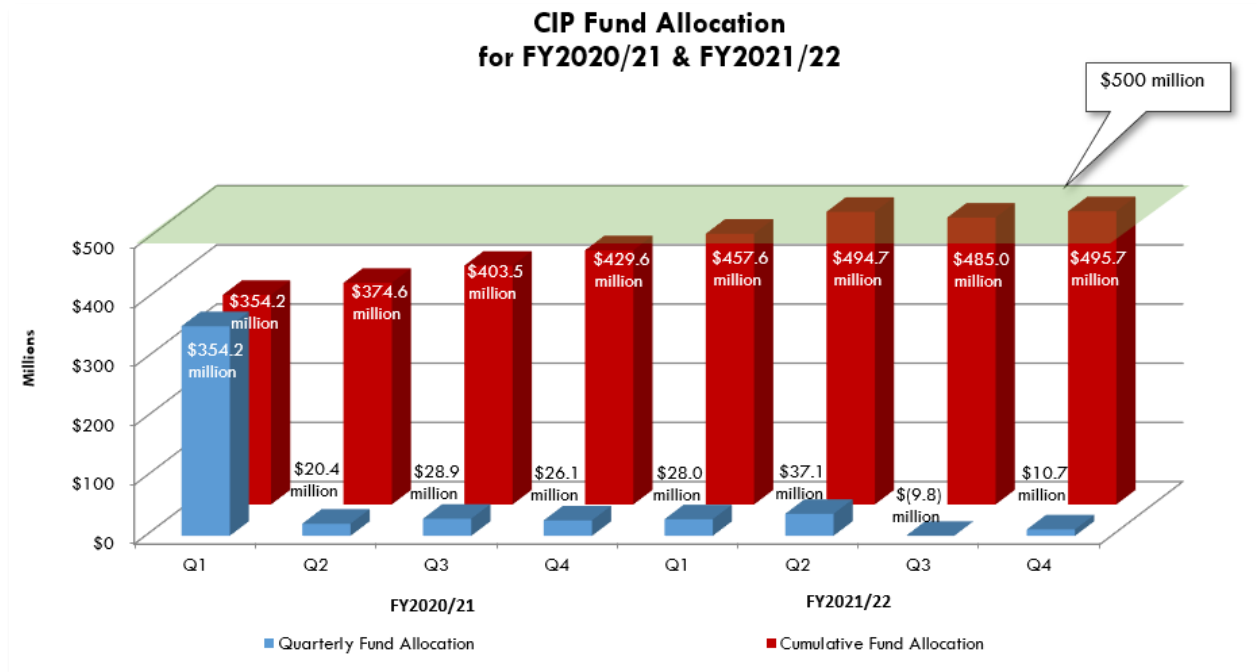
Month	Board Letter Item No.	Project	Action taken
May	7-6	OC-88 Pump Station Chiller Replacement	Awarded \$2,654,000 construction contract
May	7-7	Second Lower Feeder PCCP Rehabilitation - Reach 3A	Awarded \$11,844,700 construction contract
June	7-5	Arc Flash Assessment and Mitigation	Authorized four agreements not-to-exceed \$2,250,000 each
June	7-6	Weymouth Battery Energy Storage System	Awarded \$6,176,521 construction contract and authorized an increase of \$300,000 to an existing agreement
June	7-7	Jensen Ozone PSUs Replacement	Awarded a \$2,257,897 construction contract

The previously referenced April 2020 board action appropriated \$500 million to perform work on planned capital projects through the current biennium. In order to be considered a planned project, the project must be identified and described in the Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager’s authority. Unplanned projects, those which are not already identified in the CIP Appendix, require a separate board authorization. During the 4th Quarter, no unplanned capital projects were authorized by the Board.

During the 4th Quarter, the total amount of Appropriation No. 15517 funds authorized by the General Manager for the current biennium (FYs 2020/21 and 2021/22) through management actions including the funds for the projects shown in Table 1 is approximately \$10.7 million. Details of these management actions which occurred during the 4th Quarter can be found in the **Project Actions** section of this report.

Figure 2 shows the allocation of the funds from Appropriation 15517 for this quarter and total for the current biennium through the quarter, which is approximately \$495.7 million, leaving approximately \$4.3 million unallocated and unused.

Figure 2: CIP Fund Allocation from Appropriation No. 15517 – FY 2020/21 and FY 2021/22



*Numbers may not sum due to rounding

Information on construction and procurement contracts activities for the 4th Quarter of FY 2021/22 is summarized in Table 2 below and presented in further detail in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 4th Quarter totaled approximately \$41.7 million and primarily reflect construction progress on Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement , Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1, Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems, Lake Mathews Reservoir Wastewater System Replacement, MWD HQ Building Fire Alarm & Smoke Control Improvements, Skinner Water Treatment Plant Facility Area Paving, and Weymouth Plant Basins 5-8 & Filter Bldg. No. 2 Rehabilitation.

Table 2: 4th Quarter Contract Action

Contract Actions during Q4 for FY 2021/2022, April 2022 through June 2022	
Contracts Awarded by Board	8 construction contracts totaling \$156.11 million (Table 10)
Total Payments Authorized	\$41.70 million
Construction Contracts Completed	Notice of Completion was filed for 3 construction contracts (Table 9)
Active Contracts at end of Q4 ¹	27 construction contracts, totaling \$351.73 million (Table 11)
	15 procurement contracts, totaling \$67.10 million (Table 12)
	\$418.83 million total value*

* Numbers may not sum due to rounding.

IMPACTS OF COVID-19

In response to the Governor’s and General Manager’s emergency declarations resulting from the COVID-19 pandemic, all active construction contracts were suspended in late March 2020. Since then, all contracts except on-site work for CRA Pumping Plant Sump Rehabilitation, resumed construction activities. Staff and the contractor have negotiated a resolution to the aforementioned CRA Pumping Plant Sump Rehabilitation contract. Metropolitan will take possession of key equipment and will receive a credit for the deleted equipment installation work and equipment not provided. Currently, it is anticipated that the existing contract will be completed by fall of 2022 and the CRA Pumping Plant Sump Rehabilitation project will be re-advertised to install the equipment and materials procured under the existing contract. Supply chain issues, especially delivery delays for electrical, control, and computer equipment in addition to construction components such as roofing materials, specialty doors, power door assist hardware, heat pumps, and valves, have been reported on several construction contracts and IT projects.

¹ Active contracts at the end of the 4th Quarter are those that are ongoing at the end of June 2022. In other words, contracts completed during the reporting quarter are excluded.

PLANNED EXPENDITURE AND BUDGET

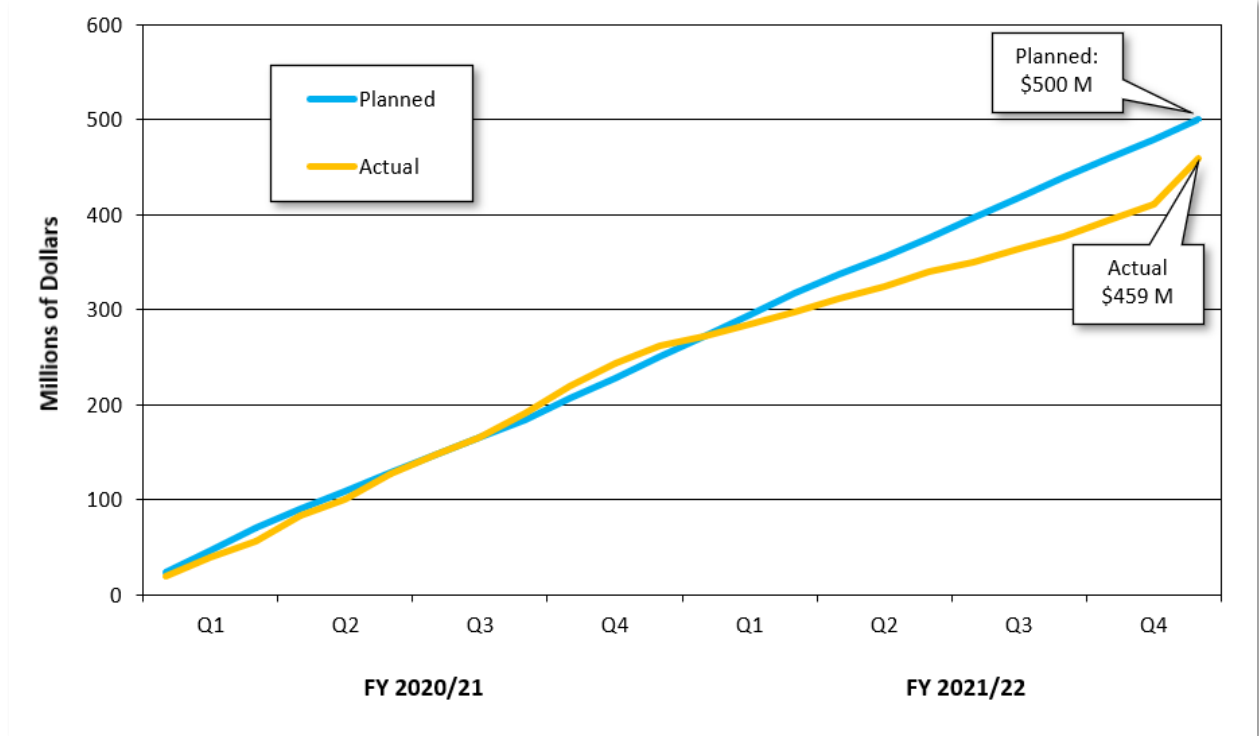
Table 3 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 4th Quarter of FY 2021/22, and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 4th Quarter of FY 2021/22 were approximately 92% of planned expenditures.

Table 3: Current Biennium: Planned & Actual Expenditures for FYs 2020/21 & 2021/22

Quarter	Planned Expenditures	Actual Expenditures
	(millions)	(millions)
FY 2020/21 Q1	\$70.4	\$55.6
Q2	\$58.5	\$72.2
Q3	\$55.0	\$63.6
Q4	\$66.1	\$70.3
FY 2021/22 Q1	\$67.0	\$36.2
Q2	\$58.3	\$42.3
Q3	\$63.3	\$36.8
Q4	\$61.4	\$81.9
Totals*	\$500.0	\$458.8

* Numbers may not sum due to rounding.

Figure 3: Current Biennium – Planned, Actual & Forecasted Expenditures



As shown in Figure 3, the total planned expenditures in the current biennium are \$500 million and the actual expenditures at the end of the current biennium are \$459 million. This negative variance below the planned expenditures is due to several factors including delays in awarding and completing some construction and procurement contracts due to the difficulties in obtaining permits within the planned timeline, the cancellation of construction portion of one construction contract due to the COVID-19 pandemic leaving only materials and equipment procurement portion, and equipment/materials delivery delays due to manufacturing and supply chain issues attributed to the COVID-19 pandemic.

MAJOR CAPITAL PROGRAMS OVERVIEW

Metropolitan's CIP is structured into three levels. In descending order, they are:

- Program
- Project Group/Appropriation
- Project

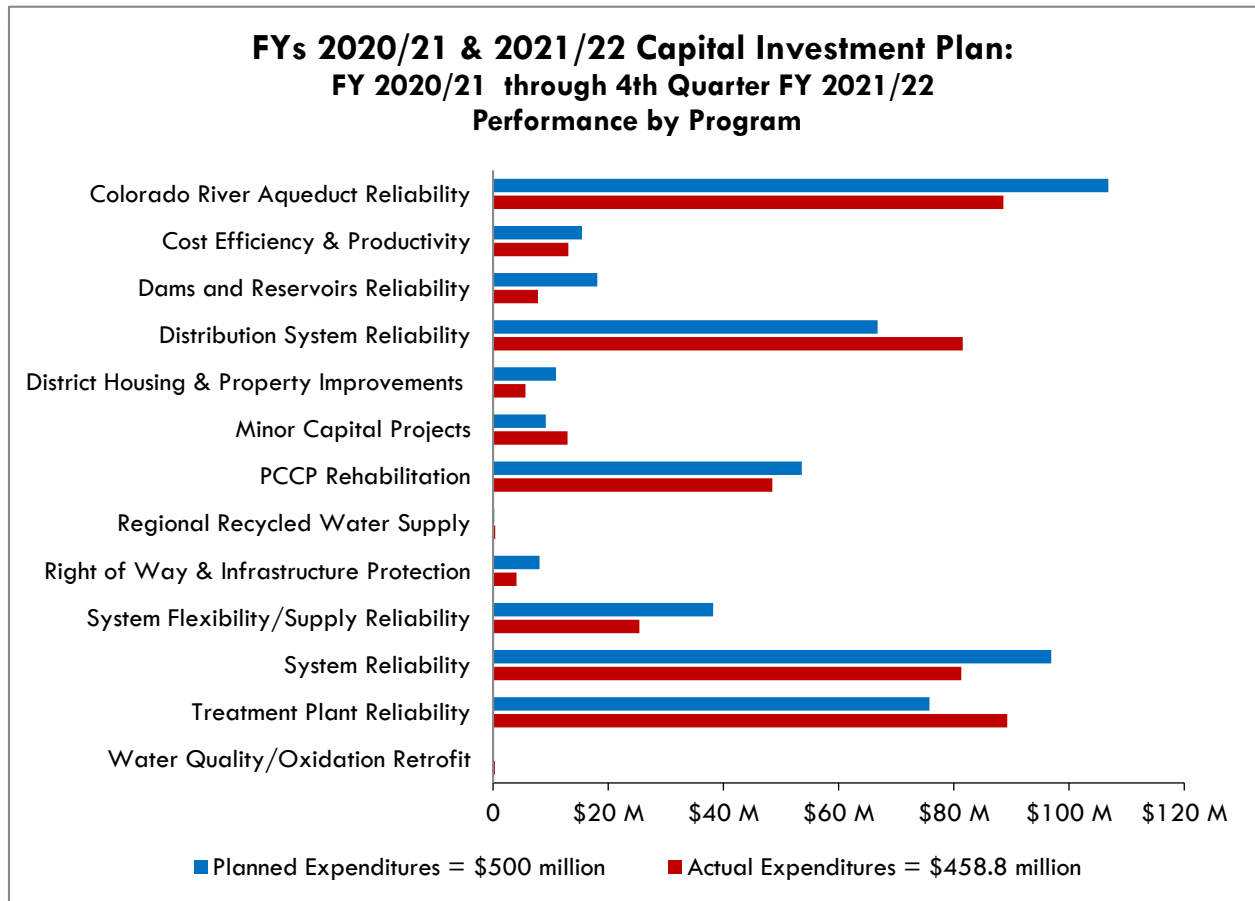
Metropolitan's CIP is comprised of 13 programs, which capture all projects within the CIP. The 13 capital programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report.

- Colorado River Aqueduct (CRA) Reliability
- Cost Efficiency & Productivity
- Dams & Reservoirs Improvements
- Distribution System Reliability
- District Housing & Property Improvements
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation
- Regional Recycled Water Supply
- Right-of-Way and Infrastructure Protection
- System Flexibility/Supply Reliability
- System Reliability
- Treatment Plant Reliability
- Water Quality/Oxidation Retrofit

For the current biennium, there are over 37 project groups, 72 planned appropriations, and 435 planned projects (excluding Minor Capital Projects) within the CIP. The list of appropriations that make up each of the programs, along with planned expenditures and actual costs to date for those appropriations, are provided in Table 15 at the end of this report.

Figure 4 below shows actual versus planned expenditures for the 13 capital programs for 4th Quarter of FY 2021/22.

Figure 4: Biennium-to-date Expenditures (Actuals vs. Planned) through 4th Quarter FY 2021/22



Variances between planned and actual expenditures for each program are primarily due to shifts in spending on current and planned construction work. The following information on the top ten capital projects provides examples of activities that contributed to such variances.

The list of projects in Table 4 below reflects the ten projects in the CIP with the highest level of planned expenditures in the current biennium. The planned versus actual expenditures through the end of the 4th Quarter of FY 2021/22 are also shown in this table.

Table 4: Top Ten Planned Capital Projects
Planned and Actual Expenditures

Project	Planned July 2020 to June 2022 (millions)	Actuals July 2020 to June 2022 (millions)
Headquarters Building Improvements	\$31.3	\$36.2
Casa Loma Siphon Barrel No. 1 Seismic Upgrade	\$30.0	\$22.4
CRA Pump Plant Sump System Rehabilitation	\$28.0	\$12.2
Perris Valley Pipeline - Tunnels	\$27.8	\$2.9
CRA Discharge Line Isolation Coupling Assemblies	\$23.0	\$18.3
Second Lower Feeder PCCP Rehabilitation - Reach 8	\$22.0	\$6.9
Jensen Electrical Upgrades - Stage 2	\$15.2	\$18.0
Diemer West Basin & Filter Building Rehabilitation	\$14.2	\$17.8
Second Lower Feeder PCCP Rehabilitation – Reach 2	\$13.0	\$5.8
Orange County Feeder Relining - Reach 3	\$12.5	\$2.6
Total*	\$217.1	\$143.3

* Numbers may not sum due to rounding.

The cumulative expenditure variance for the top ten projects through the 4th Quarter of FY 2021/22 reflects a mix of over- and under-spending on projects relative to their planned expenditures. Positive or negative variances do not mean that the projects are over or under budget, it simply reflects variances in timing of expenditures when compared to original budget plans. The following are the variance explanations for the top ten projects where actual expenditures exceeded planned expenditures through the current reporting quarter for the biennium.

- Headquarters Building Improvements:** The actual expenditures were more than planned because of the following: (1) the approval of additional change orders to complete needed work while the building was lightly occupied due to the COVID-19 pandemic; and (2) the contractor was able to accelerate completion of some work elements as the building was been lightly occupied.
- Jensen Electrical Upgrades - Stage 2:** Project expenditures for the biennium are higher than originally planned through the 4th Quarter because the contractor's work activities were expedited after the COVID-19 work suspension was lifted in order to meet the scheduled 2022 shutdown dates.

- **Diemer West Basin & Filter Building Rehabilitation:** Project expenditures for the biennium are higher than originally planned through the 4th Quarter because the contractor's work activities were expedited to meet the scheduled completion date.

The following are the variance explanations for the top ten projects with actual expenditures less than planned expenditures through the current reporting quarter for the biennium).

- **Casa Loma Siphon Barrel No. 1 Seismic Upgrade:** The actual vs. planned variance is due to a shift in timing of the award of the pipe installation contract from earlier in the biennium to December 2021 to ensure sufficient capacity in the current CIP budget to accommodate expenditures from this project in the biennium.
- **CRA Pump Plant Sump System Rehabilitation:** The actual vs. planned variance is due to the suspension of the on-site work due to the COVID-19 pandemic starting in March 2020, which led to cancellation of the construction portion of the contract. Resolution of outstanding submittal comments and supply chain issues have also caused a delay in the delivery of equipment and materials to the site.
- **Perris Valley Pipeline – Tunnels:** The actual vs. planned expenditure variance is due to postponing the start of construction from November 2020 to late 2022 due to the need to conduct additional subsurface investigations to determine groundwater treatment requirements and potential soil contamination levels. Additionally, complex right-of-way issues needed to be resolved prior to the advertisement of this project for construction bids.
- **CRA Discharge Line Isolation Coupling Assemblies:** The actual expenditures were less than planned due to the contractor completing more work than planned during the 2020 shutdown.
- **Second Lower Feeder PCCP Rehabilitation – Reach 8:** This project involved relining approximately 2,900 feet of PCCP pipeline in the City of Placentia, which is a portion of the original length of the Reach 8 project. Construction work was completed in September 2020. The planned expenditures for this biennium were based on relining 17,000 feet of PCCP but during design the scope was reduced to prioritize the most at-risk, 2,900-foot portion of the feeder. The remaining 14,100 feet of PCCP will be included in a future PCCP rehabilitation contract.
- **Second Lower Feeder PCCP Rehabilitation – Reach 2:** The actual vs. planned variance is due to shifts in the timing of construction completion, which was completed approximately five months earlier than planned and under budget leaving less work for the current biennium. Early completion of this work can be attributed to extensive preconstruction planning and permitting, successful community outreach efforts, and better than expected relining production by the contractor.
- **Orange County Feeder Relining - Reach 3:** The actual vs. planned expenditure variance is due to postponing the start of construction from September 2020 to May 2022 in order to reduce expenditures in this biennium. The final contract, for Reach 3, was awarded for construction in April 2022 to ensure that there is sufficient capacity in the current CIP budget to accommodate expenditures from this project in the biennium.

MAJOR CAPITAL PROGRAMS – HIGHLIGHTS

The section that follows provides 4th Quarter highlights for the 12 Major Capital Programs; the Minor Capital Program is highlighted in its own section of this report. Status is provided for selected projects within each Major Capital Program. The selected projects typically achieved major milestones during the 4th Quarter of FY 2021/22 or are scheduled to achieve major milestones in the next quarter.

Program	Project
Colorado River Aqueduct (CRA) Reliability	CRA Pumping Plants Water Treatment Systems Replacement
Cost Efficiency & Productivity	Battery Energy Storage System
Dams and Reservoirs Improvements	Garvey Reservoir Rehabilitation
Distribution System Reliability	Etiwanda Pipeline Lining - Stage 3
District Housing & Property Improvements	Program highlights only
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Second Lower Feeder PCCP Rehabilitation - Reach 3A
Regional Recycled Water Supply	Program highlights only
Right-of-Way & Infrastructure Protection	Program highlights only
System Flexibility/Supply Reliability	Perris Valley Pipeline - Tunnels
System Reliability	Fuel Management System Upgrade
Treatment Plant Reliability	Jensen Electrical Upgrades – Stage 2
Water Quality/Oxidation Retrofit	Program highlights only

Colorado River Aqueduct (CRA) Reliability Program

Program Information: The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system in order to reliably convey water to Southern California.

Planned Biennium Expenditures (July 2020 through June 2022)

\$106.83 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$88.61 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Expenditures for this program are less than planned due to schedule adjustments in order to optimize the construction activities of multiple contracts within the same CRA shutdown and to accommodate extended 8-pump operation, on-going supply chain disruptions, and suspension of construction contracts under Metropolitan’s response to COVID-19.

Accomplishments

- Continued construction activities for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five pumping plants:
 - i. Contractor mobilized and initiated site preparation at Intake Pumping Plant.
 - ii. Contractor continued submittals for review
 - CRA Mile 12 Flow Meter Upgrades
 - i. Completed excavation and installation of electrical grounding grid and duct banks
 - ii. Continued installation of above ground electrical conduits and junction boxes
 - iii. Began installation of security system, solar panel array equipment and control panels
 - CRA Pumping Plants Overhead Cranes Rehabilitation
 - i. Continued submittals for review
 - ii. Continued fabrication of the crane assembly for Gene Pumping Plant
 - Gene Wash Reservoir Discharge Valve Structure Rehabilitation
 - i. Filed a Notice of Completion after completing startup and commissioning activities
- Continued submittals for the water treatment equipment procurement for domestic water treatment systems at all CRA pumping plants with expected deliveries in two shipments, in late 2022 and early 2024, to coincide with the Domestic Water Treatment System Upgrades construction schedule
- Under Metropolitan’s response to COVID-19, suspended on-site construction for the CRA Pumping Plant Sump System Rehabilitation and continued submittals and fabrication activities
 - Received pump deliveries for Intake, Iron and Eagle Mountain Pumping Plants
 - Continued fabrication of remaining pumps, piping, and other materials to be furnished
- Continued final design of the CRA Sump System Rehabilitation installation contract
- Continued to evaluate and establish the course of action and construction repackaging options of the remaining outstanding contract work items for CRA 6.9 kV Power Cable Replacement
- Rejected bids for CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain due to high bids
- Continued final design of:
 - CRA Conduits Structural Protection upgrades
 - Gene Communication Reliability Upgrades
- Continued preliminary design of:

- Black Metal Mountain 2.4 kV Electrical Power Upgrades
- CRA Desert Region Security Improvements
- Hinds Pumping Plant Discharge Valve Platform Replacement
- Continued preliminary design and preparation of procurement package for the CRA Main Transformer Replacement
- Continued the CRA main pump rehabilitation efforts at all five pumping plants and performed the study to install variable frequency drive pumps at Gene and Intake Pumping Plants. Completed removal of two of the three headgates at Hinds Pumping Plant. Began preparation of procurement package for the pilot exciter system installation at Gene Pumping Plant.
- Initiated final design for utility improvement projects at Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities planned for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
 - CRA Mile 12 Flow Meter Upgrades
 - CRA Pumping Plants Overhead Crane Replacement
- Continue fabrication activities for CRA Pumping Plant Sump System Rehabilitation and receive final equipment deliveries for Gene and Hinds Pumping Plants.
- Continue final design of:
 - CRA Conduits Structural Protection Upgrades
 - Gene Communication Reliability Upgrades
- Continue preliminary design of:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements
 - Hinds Pumping Plant Discharge Valve Platform Replacement
- Continue preliminary design and preparation of a procurement package for the CRA Main Transformer Replacement
- Continue the CRA main pump rehabilitation efforts at all five pumping plants, and complete conceptual study to install variable frequency drive pumps at Gene and Intake Pumping Plants. Continue design of recirculation line up to the connection point at Eagle Mountain Pumping Plant and continue preparation of a procurement package for the pilot exciter system installation at Gene Pumping Plant.
- Continue study of CRA 2.3 kV Switchrack Rehabilitation at four CRA pumping plants and continue preliminary design of a pilot Switchrack Rehabilitation project at Iron Mountain Pumping Plant
- Initiate Value Engineering workshop to optimize cost savings for the CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain

**CRA Reliability Program:
CRA Pumping Plants Water Treatment Systems
Replacement**

This project will upgrade the domestic water treatment systems at all five Colorado River Aqueduct pumping plants.

*Estimated Construction
Completion Date:
March 2025*

*Total Project Estimate:
\$47.8 million*

*Current Phase Estimate:
\$41.5 million*

*Cost to Date for Current
Phase:
\$2.3 million*

Phase	Construction
% Complete for Construction	6%
Construction Contract Awarded	December 2021
Appropriation Number	15483
Contract Number	1949

The contractor mobilized, performed site survey, began excavation for underground electrical ductbanks and concrete support pedestals and footings, and began installation of above ground conduits for the domestic water tank and lighting at the Intake Pumping Plant. In the upcoming quarter, the contractor plans to continue installation of above ground conduits at the Intake Pumping Plant and procure the temporary treatment skids.



Contractor chip excavated subgrade for above ground conduit support pedestals at Intake Pumping Plant

Cost Efficiency and Productivity Program

Program Information: The Cost Efficiency and Productivity Program is composed of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes.

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$15.43 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$13.07 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status	Biennium expenditures for this program are less than planned due to shifts in timing of the work, with expenditures offset by schedule delays of several projects in the remaining appropriations within this program.
Accomplishments	<ul style="list-style-type: none"> • Awarded construction contract for battery energy storage system at the Weymouth plant • Prepared a request for proposal (RFP) associated with Enterprise Content Management Phase II
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Continue construction of battery energy storage systems at the Jensen and Skinner plants • Begin construction of battery energy storage system at the Weymouth plant • Continue WINS Water Billing System Upgrade • Continue Real Property Group Business System Replacement • Advertise a request for proposal (RFP) associated with Enterprise Content Management Phase II • Advertise RFP for Payroll-Timekeeping Reimplementation

**Cost Efficiency & Productivity Program:
Battery Energy Storage System**

This project will install battery energy storage systems (BESS) at three locations: (1) one-megawatt (MW) BESS at the Jensen plant, (2) one-MW BESS at the Skinner plant, and (3) one-MW BESS at the Weymouth plant. The project is eligible for participation in the Self-Generation Incentive Program (SGIP).

*Estimated Jensen and Skinner
Construction Completion Date:
October 2022*

*Estimated Weymouth
Construction Completion Date:
July 2023*

*Total Project Estimate:
\$27.0 million**

*Current Phase Estimate:
\$24.9 million*

*Cost to Date for Current
Phase:
\$3.6 million*

** In June 2022, the total
project estimate was revised
from \$25.6 million to \$27.0
million*

Phase	Construction
% Complete for Construction of Jensen and Skinner	15%
% Complete for Construction of Weymouth	0%
Contract Awarded for Jensen and Skinner	September 2021
Contract Awarded for Weymouth	June 2022
Contract Number for Jensen and Skinner	1998
Contract Number for Weymouth	2014
Appropriation Number	15521

Final design for the Weymouth plant was completed and a construction contract was awarded. Design submittals were reviewed and the contractor continued construction of the fire access road at the Skinner plant. In the upcoming quarter, the contractor will mobilize and begin construction at the Weymouth plant. Submittals will continue to be reviewed and the contractor will begin construction of the equipment pads at the Jensen and Skinner plants.



Contractor installing crushed aggregate base for fire access road at Skinner WTP

Dams and Reservoirs Improvements Program

Program Information: The Dams and Reservoirs Improvements Program is composed of projects to upgrade or refurbish Metropolitan’s dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.

Planned Biennium Expenditures (July 2020 through June 2022)

\$18.11 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$7.80 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to schedule variances associated with the Dam Monitoring System Upgrades projects and time needed for the dam safety services and dam instrumentation request for qualifications (RFQ)s.

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Completed scoping document and issued an RFQ to identify and select a qualified consultant to support implementation of the dam monitoring system upgrade
- Garvey Reservoir Rehabilitation
 - Issued an RFQ to identify qualified consultants for the dam monitoring system upgrade
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Issued an RFQ for dam safety services to identify and select a qualified consultant to complete preliminary and final design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Identified qualified consultants to perform detailed structural analysis of the outlet tower

Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Evaluate RFQ submittals and identify a consultant to support implementation of the system upgrade
- Garvey Reservoir Rehabilitation
 - Continue preliminary design
 - Evaluate RFQ submittals and identify a consultant to support implementation of the dam monitoring system upgrade
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Evaluate RFQ submittals and identify a consultant to complete preliminary and final design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Evaluate structural analysis approach and methodologies proposed by consultants, select a consultant to perform detailed structural analysis of the outlet tower

**Dams and Reservoirs Improvements Program:
Garvey Reservoir Rehabilitation**

This project will refurbish aging facilities at the Garvey Reservoir site and restore them to reliable operating condition.

*Estimated Preliminary Design
Completion Date:
December 2022*

*Total Project Estimate:
\$68.5 million*

*Current Phase Estimate:
\$3.9 million*

*Cost to Date for Current
Phase:
\$1.8 million*

Phase	Preliminary Design
% Complete for Current Phase	50%
Current Phase Authorized	March 2021
Appropriation Number	15377

Metropolitan staff and the design consultant worked on developing the preliminary design report and a request for qualifications (RFQ), which was issued to prequalify consultants for the dam monitoring system upgrade. A workshop on nitrification was also completed. In the upcoming quarter, a value engineering workshop is scheduled to be completed and a consultant will be selected for the dam monitoring work.



Existing dam monitoring station at Garvey Reservoir

Distribution System Reliability Program

Program Information: The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan’s distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, in order to reliably meet water demands.

Planned Biennium Expenditures (July 2020 through June 2022)

\$66.76 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$81.54 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are more than planned due to differences in timing between planned and actual payments for projects such as the Lakeview Pipeline Improvements and Middle Feeder Relocation for SCE Mesa Substation.

Accomplishments

- Started construction of the Casa Loma Siphon Barrel No. 1 Seismic Upgrade
- Awarded construction contracts for:
 - OC-88 Pump Station Chiller Replacement
 - Orange County Feeder Relining - Stage 3
 - West Valley, East Valley, and Sepulveda Feeders Intertie Structures Electrical Upgrades
 - Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction of Garvey Reservoir Drainage and Erosion Improvements - Areas 6 to 8, 10, and 11
- Begin construction of the Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing
- Continue testing of the Garvey Reservoir Sodium Hypochlorite Feed System Upgrades

**Distribution System Reliability Program:
Etiwanda Pipeline Lining - Stage 3**

This project will replace approximately 2.5 miles of the deteriorated internal mortar lining with a flexible polyurethane lining that could better withstand the significant changes in pressures experienced by the pipeline when operating the Etiwanda Hydroelectric Plant. This project will also reline approximately 1,300 feet of pipe with steel liner.

**Estimated Procurement
Delivery Date:**
August 2022

Total Project Estimate:
\$37.5 million*

Current Phase Estimate:
\$6.6 million

**Cost to Date for Current
Phase:**
\$6.2 million

**In June 2022, the Total
Project Estimate changed from
\$30.0 million to \$37.5 million*

Phase	Procurement
% Complete for Procurement	83%
Procurement Phase Authorized	December 2021
Appropriation Number	15441
Procurement Contract Number	2011

The construction package was advertised and opened for bids. In the upcoming quarter, a construction contract will be awarded and procured steel liner material will be delivered to the project site.



Stage 3 project location in the cities of Fontana and Rancho Cucamonga

District Housing & Property Improvements Program

Program Information: The District Housing & Property Improvements Program is composed of projects to refurbish or upgrade workforce housing at Metropolitan to enhance living conditions to attract and retain skilled employees

Planned Biennium Expenditures (July 2020 through June 2022)

\$10.94 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$5.62 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to unanticipated additional geotechnical analysis that was necessary prior to completion of the preliminary design for all of the villages.

Accomplishments

- Completed preliminary design of the housing, village enhancements, and the kitchen and lodging improvements at Gene and Iron Mountain Pumping Plants
- Completed value engineering workshop for the housing, village enhancements, and the kitchen and lodging improvements at the Hinds and Eagle Mountain Pumping Plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Authorize a consulting agreement for final design of the housing and property improvements program.
- Continue preparation of the environmental documentation in support of the housing and property improvements program

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Program Information: The PCCP Rehabilitation Program is composed of projects to refurbish or upgrade Metropolitan’s PCCP feeders to maintain water deliveries without unplanned shutdowns.

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$53.59 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$48.50 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to a delay in permitting and subsequent rescheduling of construction contract award for Second Lower Feeder Reach 3.

Accomplishments

- Second Lower Feeder Reach 3:
 - Awarded a construction contract for Reach 3A, which will reline approximately 1.2 miles of pipeline from Oak Street Pressure Control Structure south through City of Rolling Hills Estates to the Palos Verdes Reservoir
 - Continued design and permits acquisition of Reach 3B, which will reline approximately 3.6 miles of pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS, through the cities of Torrance, Los Angeles, and Lomita, and will replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder
- Allen-McColloch Pipeline:
 - Continued preliminary design for rehabilitation, including identification of proposed pipe access excavation pits for approximately 9 miles of PCCP
 - Began evaluating a member agency partnership proposal that may facilitate rehabilitation work.
- Sepulveda Feeder Reach 1 - Continued final design to rehabilitate approximately three miles of Sepulveda Feeder from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Sepulveda Feeder Reach 2 - Continued final design to rehabilitate approximately 3.8 miles of Sepulveda Feeder from the Dominguez Gap Channel crossing south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Second Lower Feeder Isolation Valve Procurement - Continued fabrication of the sixth through tenth of the thirteen large-diameter conical plug valves and actuators. Worked with the manufacturer to schedule the shipment of completed valves until PCCP Rehabilitation Valve and Equipment Storage Building is completed.

- PCCP Rehabilitation Valve and Equipment Storage Building - Completed mobilization and grading for construction of a new valve storage building at Lake Mathews. This building will safely store large-diameter valves and actuators to support the PCCP Rehabilitation Program.
- Calabasas Feeder – Solicited proposals for engineering services to complete preliminary design work the relining of the entire approximately nine miles long Calabasas Feeder PCCP line

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder Reach 3A - Review contractor submittals
- Second Lower Feeder Reach 3B - Continue final design and seek construction permit approvals
- Sepulveda Feeder South Reaches 1 and 2 - Continue developing final designs and initiate permitting process for long-lead permits from Caltrans, City of Los Angeles, and City of Torrance
- Sepulveda Feeder North – Authorize a new agreement for preliminary design
- Second Lower Feeder Isolation Valve Procurement - Complete fabrication of the sixth and continue fabrication on the seventh through tenth of thirteen large-diameter conical plug valves
- PCCP Rehabilitation Valve and Equipment Storage Building - Continue contractor submittal reviews and site work including drainage improvements and utilities
- Allen-McColloch Pipeline - Continue preliminary design and prepare a response to member agency's input to shutdown planning
- Calabasas Feeder Preliminary Design - Authorize a new professional services agreement to complete preliminary design

Estimated Construction Completion Date:
June 2023

Reach 3A Total Project Estimate:
\$21.6 million

Current Phase Estimate:
\$18.3 million

Cost to Date for Current Phase:
\$0.5 million

**PCCP Rehabilitation Program:
Second Lower Feeder PCCP Rehabilitation –
Reach 3A**

This project will rehabilitate approximately 1.2 miles of PCCP segments of the Second Lower Feeder within the city of Rolling Hills Estates with steel liner. The project will also enlarge four existing pipe access shafts for improved egress and relocate one air release and vacuum valve.

Phase	Construction & Closeout
% Complete for Construction	2%
Construction Contract Awarded	May 2022
Appropriation Number	15497
Contract Number	1903

The Reach 3A construction contract was awarded and a notice to proceed (NTP) was issued. In the upcoming quarter, submittal review, coordination with the City of Rolling Hills Estates and contractor, and community outreach will begin.



Second Lower Feeder Reach 3A pipe new access sites in the City of Rolling Hills Estates

Regional Recycled Water Supply Program

Program Information: *The Regional Recycled Water Supply (Pure Water Southern California) Program includes the design and construction of the Advanced Water Treatment (AWT) Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California.*

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$0.21 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$0.37 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status	Biennium expenditures for this program are consistent with planned expenditures.
Accomplishments	<ul style="list-style-type: none"> • Advanced Water Treatment Demonstration Facility: <ul style="list-style-type: none"> ○ Coordinated with the independent scientific advisory panel to review Phase 1 draft testing report • Direct Potable Reuse Demonstration Facility <ul style="list-style-type: none"> ○ Initiated study and conducted technical workshops to identify potential studies for testing future direct potable reuse (DPR) processes
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Continue warranty repairs on equipment and post-contract system improvements to enhance safety and operational reliability of the AWT • Advanced Water Treatment Demonstration Facility: <ul style="list-style-type: none"> ○ Continue coordination with the State Water Resources Control Board to submit final reimbursement invoice as part of the grant funding agreement ○ Continue to finalize Phase 1 testing report ○ Continue post-construction contract improvements to enhance safety and operational reliability • Direct Potable Reuse Demonstration Facility: <ul style="list-style-type: none"> ○ Continue study to modify the AWT Demonstration Facility to allow testing of future direct potable reuse processes

Right-Of-Way and Infrastructure Protection Program

Program Information: The Right of Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan’s pipelines in order to address access limitations, erosion-related issues, and security needs.

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$8.07 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$4.08 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to design resources being diverted to work on urgent drought related projects.

Accomplishments

- Began construction of Western San Bernardino County - Stage 1

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue final design for Western San Bernardino County Region - Stage 2
- Continue final design for two urgent repair sites along San Diego Pipelines 4 & 5 as part of Riverside and San Diego County Region - Stage 2

System Flexibility/Supply Reliability Program

Program Information: The System Flexibility/Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan’s water supply and delivery infrastructure to meet service demands.

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$38.21 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$25.41 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to differences between the planned and actual start of the Perris Valley Pipeline Tunnels and other projects.

Accomplishments

- Advertised a contract to procure large diameter isolation valves for the Rialto Pipeline Water Supply Reliability Improvements projects
- Completed design of the Perris Valley Pipeline Tunnels

Upcoming Activities

Upcoming work for the next quarter will include:

- Advertise a contract for construction of the Perris Valley Pipeline Tunnels
- Continue design of the Rialto Pipeline Water Supply Reliability Improvements. This effort consists of the following individual projects.
 - Wadsworth Pumping Plant Bypass Pipeline
 - Wadsworth Pumping Plant Stage 2 - Badlands Tunnel Surge Tank Facility
 - Inland Feeder/Rialto Pipeline Intertie
 - Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Pump Station Intertie
- Award a contract to procure large diameter isolation valves for the Rialto Pipeline Water Supply Reliability Improvements
- Complete evaluation of the West Service Area Water Supply Reliability Improvements consisting of the following individual projects:
 - West Area Supply and Delivery Alternatives
 - Drought Response West Side Pump Station

**System Flexibility/Supply Reliability Program:
Perris Valley Pipeline - Tunnels**

Final Design Completion Date:
June 2022

Total Project Estimate:
\$78.2 million*

Current Phase Estimate:
\$4.8 million**

Cost to Date for Current Phase:
\$4.8 million

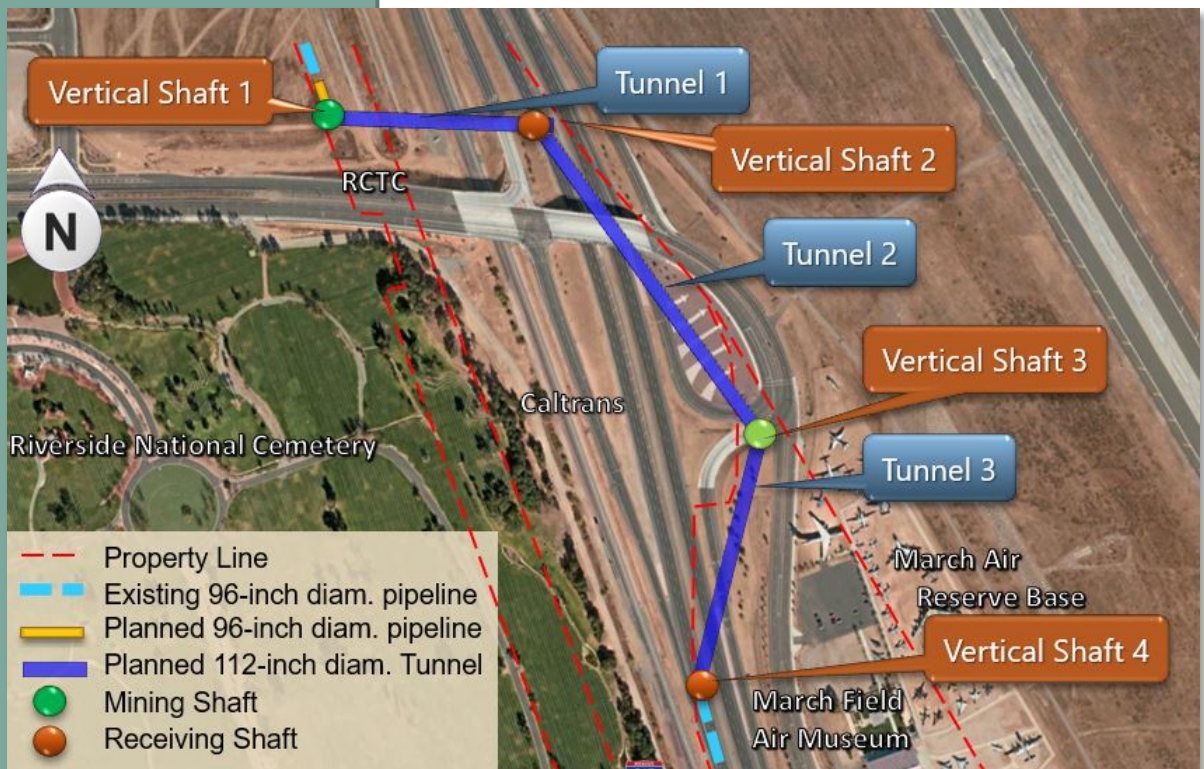
**In May 2022 the total project estimate changed from \$66.0 million to \$78.2 million*

***\$5.4 million reported in Q1 of FY 2021/22 included preliminary design*

This project will connect northern and southern reaches of Perris Valley Pipeline by micro-tunneling and constructing approximately 3,000 linear feet of 97-inch diameter welded steel pipe, connecting a short adit tunnel and four shafts, access manholes, cathodic protection test stations, geotechnical instrumentation and monitoring equipment.

Phase	Final Design
% Complete for Current Phase	100%
Current Phase Authorized	January 2010
Appropriation Number	15425

Final design was completed, and negotiations continued with March Joint Powers Authority and Caltrans to obtain the necessary easements and permits prior to the start of construction. In the upcoming quarter, the construction bid package will be advertised.



Interstate 215 crossing project area

System Reliability Program

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan’s service area in order to utilize new processes and/or technologies, and improve facility safety and overall reliability. These include projects related to Metropolitan’s Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

Planned Biennium Expenditures (July 2020 through June 2022)

\$96.91 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$81.30 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status

Biennium expenditures for this program are less than planned due to shift in timing of the work and supply chain disruption.

Accomplishments

- Desert Microwave Site Tower Upgrades - performed detailed planning using data gathered from site visits
- Fuel Management System Upgrade - monitored pilot installation of first fuel management unit at Sunset Garage site
- Headquarters Fire Alarm Upgrade - Fire alarm system upgrades are completed on floors P1 through the 3rd floor
- Completed construction for Lake Mathews Disaster Recovery Facility Upgrades
- Skinner Facility Area Paving - continued construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Applications-Servers Upgrade - continue to migrate and upgrade applications in batches
- Datacenter Backup Infrastructure Upgrade - advertise a request for proposal (RFP)
- Headquarters Fire Alarm Upgrade - continue upgrade of building fire and life safety systems
- Headquarters Security Upgrade Stage 2 - continue installation of new interior building security features
- MWD Cyber Security Upgrade:
 - Continue deployment of secure web gateway software to MWD-owned workstations and laptops
 - Continue deployment of privileged access management software to MWD-owned workstations, laptops, and servers
- Skinner Facility Area Paving - complete construction
- WiFi Upgrade:
 - Headquarters building access point - continue installation

**Estimated Deployment
Completion Date:**
June 2023

Total Project Estimate:
\$1.5 million

Current Phase Estimate:
\$1.0 million

**Cost to Date for Current
Phase:**
\$93,000

**System Reliability Program:
Fuel Management System Upgrade**

This project will replace the existing fuel management system with a newer, more capable, and reliable system.

Phase	Deployment
% Complete for Current Phase	9%
Current Phase Authorized	September 2021
Appropriation Number	15501

The pilot site at Sunset Garage was monitored. Jensen, Soto, Diemer, and La Verne sites were prepared for installation. In the upcoming quarter, installations will begin at Jensen, Soto, Diemer, and La Verne. Pool vehicles at Union Station will be fitted with transponder devices.



Pilot fuel management kiosk at Sunset Garage

Treatment Plant Reliability Program

Program Information: The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan’s five water treatment plants in order to continue to reliably meet treated water demands.

Planned Biennium Expenditures (July 2020 through June 2022)

\$75.78 million

Actual Biennium Expenditures (July 2020 through June 2022)

\$89.26 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status	Biennial expenditures for this program are more than planned due to shifts in timing of the work.
Accomplishments	<ul style="list-style-type: none"> • Completed construction of Jensen Electrical Upgrades – Stage 2 • Completed preliminary design of Weymouth Administration and Control Buildings seismic upgrades • Began preliminary design of: <ul style="list-style-type: none"> ○ Diemer Filter Rehabilitation ○ Jensen Reservoir Bypass Gate Replacement ○ Water Quality Laboratory Upgrades • Awarded construction contract and began construction of: <ul style="list-style-type: none"> ○ Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation ○ Jensen Ozone PSU Replacement – Stage 1 • Continued construction of: <ul style="list-style-type: none"> ○ Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades • Continued procurement of power supply units (PSU) and dielectrics for Jensen ozone generators • Began equipment procurement for Diemer Power and Distribution Panel Upgrade
Upcoming Activities	<p>Upcoming work for the next quarter will include:</p> <ul style="list-style-type: none"> • Continue procurement of: <ul style="list-style-type: none"> ○ Jensen ozone PSUs and dielectrics. Delivery of the equipment is expected in the summer of 2022. ○ Equipment for Diemer Power and Distribution Panel Upgrade • Obtain authorization of an agreement for final design to upgrade Weymouth Administration and Control Buildings • Continue preliminary design of: <ul style="list-style-type: none"> ○ Diemer Filter Rehabilitation ○ Jensen Reservoir Bypass Gate Replacement ○ Water Quality Laboratory Upgrades • Continue construction of: <ul style="list-style-type: none"> ○ Jensen Ozone PSU Replacement – Stage 1 ○ Mills Electrical Upgrades - Stage 2 ○ Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades ○ Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation

**Treatment Plant Reliability Program:
Jensen Electrical Upgrades – Stage 2**

The Stage 2 improvements will upgrade two unit power centers and their associated motor control centers and provide needed redundancy for critical components of the plant’s electrical system.

Construction Completion Date:
June 2022

Total Project Estimate:
\$52.5 million

Current Phase Estimate:
\$23.5 million

Cost to Date for Current Phase:
\$22.0 million

Phase	Construction & Closeout
% Complete for Construction	100%
Construction Contract Awarded	July 2019
Appropriation Number	15442
Contract Number	1914

Construction was completed and a Notice of Completion (NOC) was filed. In the upcoming quarter, record drawings will be prepared and the project will be closed out.



Completed unit substations 7A&B and 9A&B at the Jensen plant

Water Quality/Oxidation Retrofit Program

Program Information: The Water Quality/Oxidation Retrofit Program (ORP) is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan’s treatment plants and throughout the distribution system.

**Planned Biennium Expenditures
(July 2020 through June 2022)**

\$0.02 million

**Actual Biennium Expenditures
(July 2020 through June 2022)**

\$0.33 million

PROGRAM HIGHLIGHTS (4th Quarter)

Status	Biennial expenditures and progress are consistent with the plan for this program
Accomplishments	<ul style="list-style-type: none"> • Mills Enhanced Bromate Control Facilities <ul style="list-style-type: none"> ○ Continued final design
Upcoming Activities	Upcoming work for the next quarter will include: <ul style="list-style-type: none"> • Continue final design of Mills Enhanced Bromate Control Facilities

MINOR CAPITAL PROGRAM

The Minor Capital Projects (Minor Cap) Program is authorized biennially to enable staff to expedite small capital projects. At the commencement of each biennium, the Board had appropriated the entire two-year budget for the program. For the current biennium, the minor cap budget was included in the CIP appropriation. In order to be considered for inclusion in the Minor Cap Program, a project must have a planned budget of less than \$400,000. The \$400,000 project budget cap was first established by the June 2018 board action Item 8-3 and the same cap is applied for the new minor caps that are approved for the current biennium. Prior to that action, the budget cap for minor cap projects was \$250,000.

The duration of minor capital projects typically ranges from a few months to three years. Since many of these projects require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities, the Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional board approval.

For the past two bienniums, the two-year budgets for the Minor Cap Program have been \$10 million, and \$15.5 million respectively. In April 2020, the Board appropriated funds for the projects identified in the CIP appendix for the current biennium, FYs 2020/21–2021/22, including the Minor Cap Program. \$20 million has been allocated for the current biennium.

Minor Cap Program Historical Summary

The following table provides the overall status of the Minor Cap appropriations for the fiscal years 2016/17-2017/18 through 2020/21–2021/22.

	Fiscal Year			Totals
	2016/17– 2017/18	2018/19– 2019/20	2020/21– 2021/22	
Amount Appropriated	\$10M	\$15.5M	\$20M	\$45.5M
Expenditures (through June 2022)	\$7.2M	\$11.4M	\$6.7M	\$25.3M
Number of Projects Approved	41	48	54	143
Number of Projects Completed (through June 2022)	40	29	4	73
Percent of Work Complete	99%	88%	39%	N/A
Number of Projects with Durations of Over 3 Years	1	7	0	0

Through June 2022, 72 of the 142 projects have been completed, and seven active projects have exceeded three years in duration, as described below.

- Garvey Reservoir Sodium Hypochlorite Tank Replacement has experienced delays due to the Texas deep freeze event, which caused power and resin supply chain disruptions in 2021. As a result, delivery of the new tank has been rescheduled and is now expected by July 2022. Metropolitan force construction will complete tank installation by December 2022.
- Gene Inlet Surge Chamber Access Improvement has experienced delays due to re-scheduling of the installation of recently fabricated hatch cover, which can only occur when Gene Wash Reservoir water level is lowered. Metropolitan force construction plans to complete the hatch cover installation during the 2023 CRA shutdown and complete the project by April 2023.
- Gene Pool Refurbishment has experienced delays due to shortage of local contractors for this type of work due to increased construction activity in the region. Metropolitan force construction will complete the work and the project is scheduled to be completed by December 2022.
- Irvine Regulating Structure Sump Drain Line Modification is substantially complete. The project is scheduled to be closed upon contractor's completion of punch-list items, in August 2022.
- OC-88 Fire Protection System Upgrades started construction in late 2021, however, the contract was terminated as a result of the contractor's debarment by the State of California's Department of Industrial Relations. A new contract has been awarded, and the project is scheduled to be completed in September 2022.
- San Diego Pipeline No. 2 Access Road Relocation was originally advertised for bids in November 2020 to be constructed by a contractor, but construction did not start in Spring 2021 as planned due to COVID-19 pandemic restrictions and the contract was terminated. Now the work is being performed by Metropolitan force construction, and the project is scheduled to be completed in August 2022
- Water Quality HVAC Energy Management Upgrade construction was completed in June 2022. The project was closed in July 2022.

Planned biennium expenditures to date (July 2020 through June 2022) for the Minor Capital Projects Program were \$9.15 million, while actual biennium expenditures for the same period were \$12.94 million.

Minor Cap Projects, 4th Quarter

Authorized Projects

Seven projects were authorized under the Minor Cap Program during the 4th Quarter of fiscal year 2021/22 (April through June 2022):

- CRA Canal Sidewall Replacement at Mile Marker 33 – This project will replace three areas of deteriorated canal sidewall panels, covering an area of approximately 1,500 square feet, on the CRA canal located near mile marker 33.4. The project budget is \$180,000.
- CRA Fall Prevention Swing Gates - This project will procure and install self-closing swing gates to replace existing fall prevention chains located on fixed-ladder ways and elevated

platforms at the CRA conveyance and distribution facilities, to comply with updated Cal-OSHA requirements. The project budget is \$308,000.

- Foothill Feeder Pipe Protection – This project will replace the eroded soil cover to protect the exposed Foothill Feeder pipeline along the Newhall Creek. The project budget is \$390,000.
- Skinner Plant Chemical Flowmeter Replacement - This project will replace 16 chemical flow meters at the Skinner plant, which are obsolete and no longer supported by the manufacturer. The project budget is \$355,000.
- Skinner Plant No. 1 Filter Access Improvements – This project will design and install ladder access gates at 54 filters in Skinner Plant No. 1 to enhance personnel safety. The project budget is \$360,000.
- Skinner Washwater Reclamation Plant No. 2 Basin 6 Launder and Weir Replacement – This project will remove and replace the aging fiberglass launders, weirs, and associated stainless steel hardware in Basin 6 of the Washwater Reclamation Plant No. 2 to improve effectiveness of suspended solids collection. The project budget is \$350,000.
- Vibration Data Collection System Upgrade – This project will upgrade and modernize the vibration collection system located at Gene Pumping Plant and DVL, which are no longer supported by the manufacturer and does not transmit data to the central server that collects vibration data from other locations. The project budget is \$110,000.

Completed Projects

Four projects were completed under the Minor Cap Program during the 4th Quarter of fiscal year 2021/22 (April through June 2022):

- CRA Lakeview Siphon Leak Repair
- CRA Pumping Plant Station Battery Replacement
- San Diego Canal Dewatering Sump Upgrade
- West Coast Feeder/Palos Verdes Feeder Interconnection Valve Automation

Cancelled Projects

- None

PROJECT ACTIONS

Table 5 lists capital project actions authorized by the Board and the General Manager along with funding allocation amounts during the 4th Quarter of FY 2021/22, through the authority delegated by the Board in April 2020. The total funding amount authorized by the General Manager during the 4th Quarter is \$17,676,200, through thirty-six management actions. In some cases listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session.

Table 5: Capital Projects Funded by General Manager Authorization

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Arc Flash Software Model Development	Assessment, Development, Analyses, & Mitigation	\$0	\$12,000,000
Battery Energy Storage System at Weymouth Water Treatment Plant	Construction	\$50,000	\$9,030,000
CRA Pumping Plants 6.9 kV Power Cable Replacement ²	Expert Witness and Legal Services	\$300,000	\$900,000
Diemer Chemical Feed System Improvements ³	Additional Preliminary Design	\$500,000	\$3,768,000
Diemer Filter Rehabilitation	Preliminary Design	\$341,000	\$1,573,000
Diemer Power and Distribution Panel Upgrades	Procurement and Construction	\$285,000	\$1,350,000
Direct Potable Reuse Demonstration Facility	Preliminary Design Oversight	\$400,000	\$400,000
Greg Avenue Pump Station Rehabilitation ⁴	Additional Design, Procurement, Installation, Testing, and Start up	\$250,000	\$1,580,910

² Additional funds were required for legal and consulting services authorized per April 2022 Board letter Item 7-17 heard in closed session.

³ Additional funds were required to update preliminary design to address changed chemical feed design criteria after the implementation of ozonation at the Diemer plant.

⁴ Additional funds were required for staff time, design, procurement, installation, start-up support, and record drawings of new check valves and mechanical seals for system enhancements to facilitate around the clock, unstaffed operation.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Jensen Electrical Upgrades - Stage 3	Study	\$740,000	\$3,400,000
Jensen Solids Mechanical Dewatering Facility	Study	\$45,000	\$50,000
Jensen Ozone PSUs Replacement – Stage 2	System Evaluation	\$510,000	\$510,000
Jensen Ozone PSUs Replacement – Stage 1 ⁵	Additional Construction	\$0	\$780,897
Jensen Reservoir Bypass Gate Refurbishment	Preliminary Design	\$148,000	\$522,000
Jensen Site Security Improvements ⁶	Additional Preliminary Design	\$205,000	\$205,000
La Verne Shops Building Completion – Stage 5	Construction	\$467,200	\$24,700,000
Mills Plant Control System Upgrade	Design, Procurement, & Implementation	\$240,000	\$19,945,000
OC-88 Pump Station Chillers Replacement	Construction	\$100,000	\$4,200,000
Orange County Feeder Relining - Reach 3 ⁷	Additional Final Design, Re-permitting, & Lease Extension	\$800,000	\$800,000
Orange County Feeder Relining - Reach 3	Construction	\$1,000,000	\$22,400,000
Payroll and Timekeeping System Upgrade	Design, Development, & Deployment	\$250,000	\$1,670,000

⁵ Additional authorization was required for the increased amount of the construction contract resulting from the difference between the November 2021 and June 2022 board awards after finding out that the original contractor was debarred from bidding or being awarded a public works contract in California.

⁶ Additional preliminary design funds were required to perform comprehensive subsurface utility survey to validate alignment for approximately 4,600 linear feet of new duct banks.

⁷ Additional funds were required for final design to comply with updated pipeline access hole safety criteria, re-permitting with different agencies, and land lease extension of pipe storage site location.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Perris Valley Pipeline - Tunnels ⁸	Additional Geotechnical Investigation, CEQA Documentation, Preliminary Design, & Final Design	\$2,700,000	\$2,700,000
San Diego Canal Radial Gate Replacement ⁹	Additional investigation, Final Design, Fabrication, & Installation	\$310,000	\$320,000
Second Lower Feeder PCCP Rehabilitation – Reach 3A	Construction	\$0	\$19,100,000
Seven Minor Capital Projects	Design & Construction	\$2,053,000	\$2,053,000
Skinner Facility Area Paving ¹⁰	Additional Construction	\$250,000	\$250,000
Upgrades at Three Sepulveda Feeder Structures	Construction	\$50,000	\$4,700,000
Weymouth Chlorination System Upgrades ¹¹	Additional Construction	\$250,000	\$250,000
Weymouth Domestic and Fire Water System Improvements ¹²	Additional Construction	\$150,000	\$150,000
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	Construction	\$5,000,000	\$114,000,000

⁸ Additional design funds were required to realign pipeline to avoid sources of groundwater, avoid crossing under bridge abutments, and reduce potential ground settlement impacts to I-215 Freeway. The funds were also required to perform additional site environmental surveys and prepare an addendum to the original Environmental Impact Report.

⁹ Additional funds were required for investigation, design, fabrication, and installation of steel structural members to stiffen the V-06 radial gate after cracks were discovered during 2021 CRA shutdown inspection of the gate.

¹⁰ Additional construction funds were required to improve additional areas of deteriorating pavement identified during construction.

¹¹ Additional funds were required for shutdown coordination, revisions during commissioning and testing, staff labor to complete start-up, record drawings, and integration of chlorination equipment.

¹² Additional funds were required for coordination and field inspection due to the realignment of the potable water line and to update record drawings.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Weymouth Water Quality Instrumentation Improvements ¹³	Additional Construction	\$150,000	\$150,000
Whitewater Tunnel No. 2 Seismic Upgrade ¹⁴	Additional Preliminary Design	\$440,000	\$440,000
	Total	\$17,984,200	\$253,897,807¹⁵

Due to a reduction or increase in anticipated expenditures through June 2022 on the following projects, \$9.5 million was returned to and \$2.2 million was reallocated from the CIP Appropriation (Appropriation No. 15517). Reallocations from Appropriation No. 15517 were distributed to the previously authorized projects listed in Table 6 below. While these reallocations changed the biennial funded amount, the total authorized funding for each project remained the same.

Table 6: General Manager Actions to Reallocate Capital Project Funds

Project	Amount Authorized for Reallocation To/From CIP Appn.	Total Amount from CIP Appn. for Current Biennium
Headquarters Fire Alarm and Smoke Control Upgrades	\$(9,000,000)	\$10,553,000
Casa Loma Siphon #1 Seismic Upgrades	\$2,100,000	\$20,387,019
Greg Avenue Pump Station Rehabilitation	\$60,000	\$13,976,800
La Verne Shops Building Completion – Stage 5	\$60,000	\$525,000
Jensen Ozone PSUs Replacement - Stage 1	\$(510,000)	\$6,182,000
	Total:	\$(7,290,000)

¹³ Additional funds were required for testing and calibration of additional water quality instruments, completion of start-up, commissioning, and record drawings.

¹⁴ Additional funds were required for preliminary design activities including additional geotechnical investigation to improve the road access to the west portal area, additional structural analysis to better define the length of the tunnel at the portal sections, and value engineering.

¹⁵ Excludes \$900,000 reduction in total amount authorized for Direct Potable Reuse Demonstration Facility which was previously reported as \$2,700,000 in Q2 of FY 2021-22. The corrected amount authorized by October 2021 Board letter Item 7-3 is \$1,800,000.

CEQA DETERMINATIONS

Table 7 lists CEQA exemption determinations made by the General Manager during the 4th Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2020. Adoption of Negative Declarations and Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan’s Board. This table excludes information on board items heard in closed session.

Table 7: CEQA Exemption Determinations

Projects
Live Oak Reservoir Bypass Pipeline Cathodic Protection
Badlands Tunnel Surge Tank Facility
Headquarters Building Physical Security Improvements – Stage 3

CONSTRUCTION AND PROCUREMENT CONTRACTS

The table below summarizes the status of all construction and procurement contracts that were active during the reporting quarter. These contracts are listed in Table 9, Table 11, and Table 12. Total contract earnings for the 4th Quarter were approximately \$41,702,349.

*Table 8: Summary of Construction and Procurement Contracts during 4th Quarter
(April through June 2022)*

Summary	Construction	Procurement
Number of Contracts Active during this Quarter ¹⁶	30	15
Total Contract Amount of Active Contracts	\$372,988,390	\$67,101,522
Number of Contracts Completed this Quarter ¹⁷	3	0
Number of Contracts Awarded this Quarter ¹⁸	9	0
Total Contract Amount of Contracts Awarded this Quarter	\$157,312,960	\$0
Contract Earnings ^{19, 20, 21} this Quarter	\$22,746,929	\$18,955,420

The figures on the next two pages show the locations of the thirty active construction contracts during the 4th Quarter.

¹⁶ Number of Contracts Active during this Quarter includes those that were underway as well as those that were completed during the 4th Quarter.

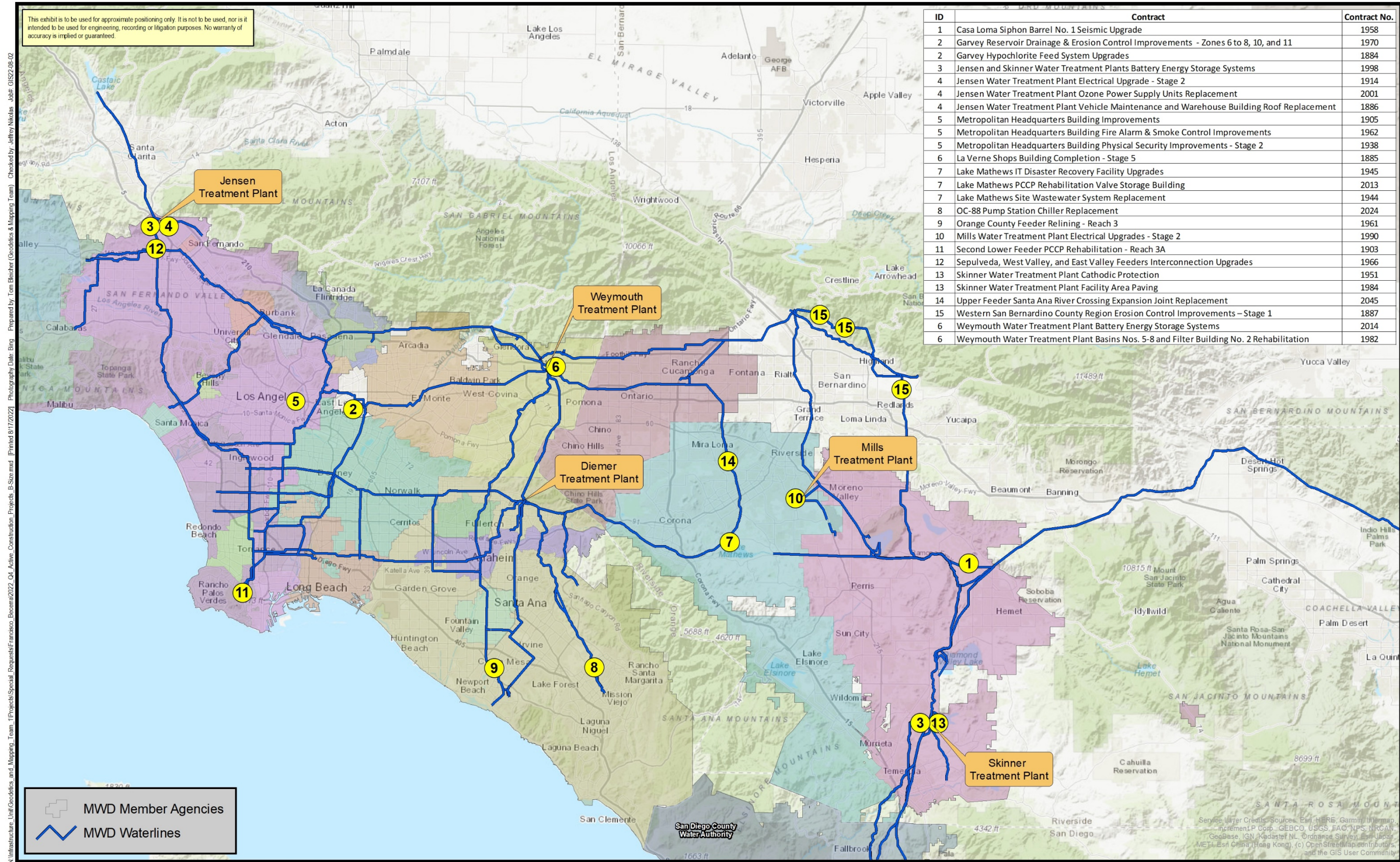
¹⁷ Completed construction contracts are those which Metropolitan has accepted as physically complete and has filed Notice of Completion during the 4th Quarter. Completed procurement contracts are those which Metropolitan has received complete delivery and use of field services during the 4th Quarter.

¹⁸ On June 28, 2022, Metropolitan awarded Contract No. 2045 under the General Manager's contracting authority in specified circumstances to PCL Construction, Inc. to respond to an emergency on the Upper Feeder at the Santa Ana River Bridge.

¹⁹ Contract earnings reflected in this report represent the value of the work performed by the contractor by the 25th day of the month. Contract earnings include contract retention and other similar deductions for the amounts earned by the contractor, but otherwise required to be withheld by Metropolitan by law or by contract.

²⁰ Contract payments are typically made by Metropolitan in the month following performance of the work.

²¹ For the reasons listed above in the preceding two footnotes, contract payments in Metropolitan's financial system may be less than the earnings until the final payment has been made to the contractor.



ID	Contract	Contract No.
1	Casa Loma Siphon Barrel No. 1 Seismic Upgrade	1958
2	Garvey Reservoir Drainage & Erosion Control Improvements - Zones 6 to 8, 10, and 11	1970
2	Garvey Hypochlorite Feed System Upgrades	1884
3	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	1998
4	Jensen Water Treatment Plant Electrical Upgrade - Stage 2	1914
4	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	2001
4	Jensen Water Treatment Plant Vehicle Maintenance and Warehouse Building Roof Replacement	1886
5	Metropolitan Headquarters Building Improvements	1905
5	Metropolitan Headquarters Building Fire Alarm & Smoke Control Improvements	1962
5	Metropolitan Headquarters Building Physical Security Improvements - Stage 2	1938
6	La Verne Shops Building Completion - Stage 5	1885
7	Lake Mathews IT Disaster Recovery Facility Upgrades	1945
7	Lake Mathews PCCP Rehabilitation Valve Storage Building	2013
7	Lake Mathews Site Wastewater System Replacement	1944
8	OC-88 Pump Station Chiller Replacement	2024
9	Orange County Feeder Relining - Reach 3	1961
10	Mills Water Treatment Plant Electrical Upgrades - Stage 2	1990
11	Second Lower Feeder PCCP Rehabilitation - Reach 3A	1903
12	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	1966
13	Skinner Water Treatment Plant Cathodic Protection	1951
13	Skinner Water Treatment Plant Facility Area Paving	1984
14	Upper Feeder Santa Ana River Crossing Expansion Joint Replacement	2045
15	Western San Bernardino County Region Erosion Control Improvements - Stage 1	1887
6	Weymouth Water Treatment Plant Battery Energy Storage Systems	2014
6	Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	1982

This exhibit is to be used for approximate positioning only. It is not to be used, nor is it intended to be used for engineering, recording or litigation purposes. No warranty of accuracy is implied or guaranteed.

N:\Infrastructure\Link\Geodetics and Mapping\Team_1\Projects\Special_Requests\Franco\Becerra\2022_04_Active_Construction_Projects_B-Sizes.mxd [Printed 8/17/2022] Photography Date: Bing Prepared by: Tom Bleicher (Geodetics & Mapping Team) Checked by: Jeffrey Nikolas Job#: 0152208-02

Figure 5: Construction Contracts - Greater Los Angeles Region

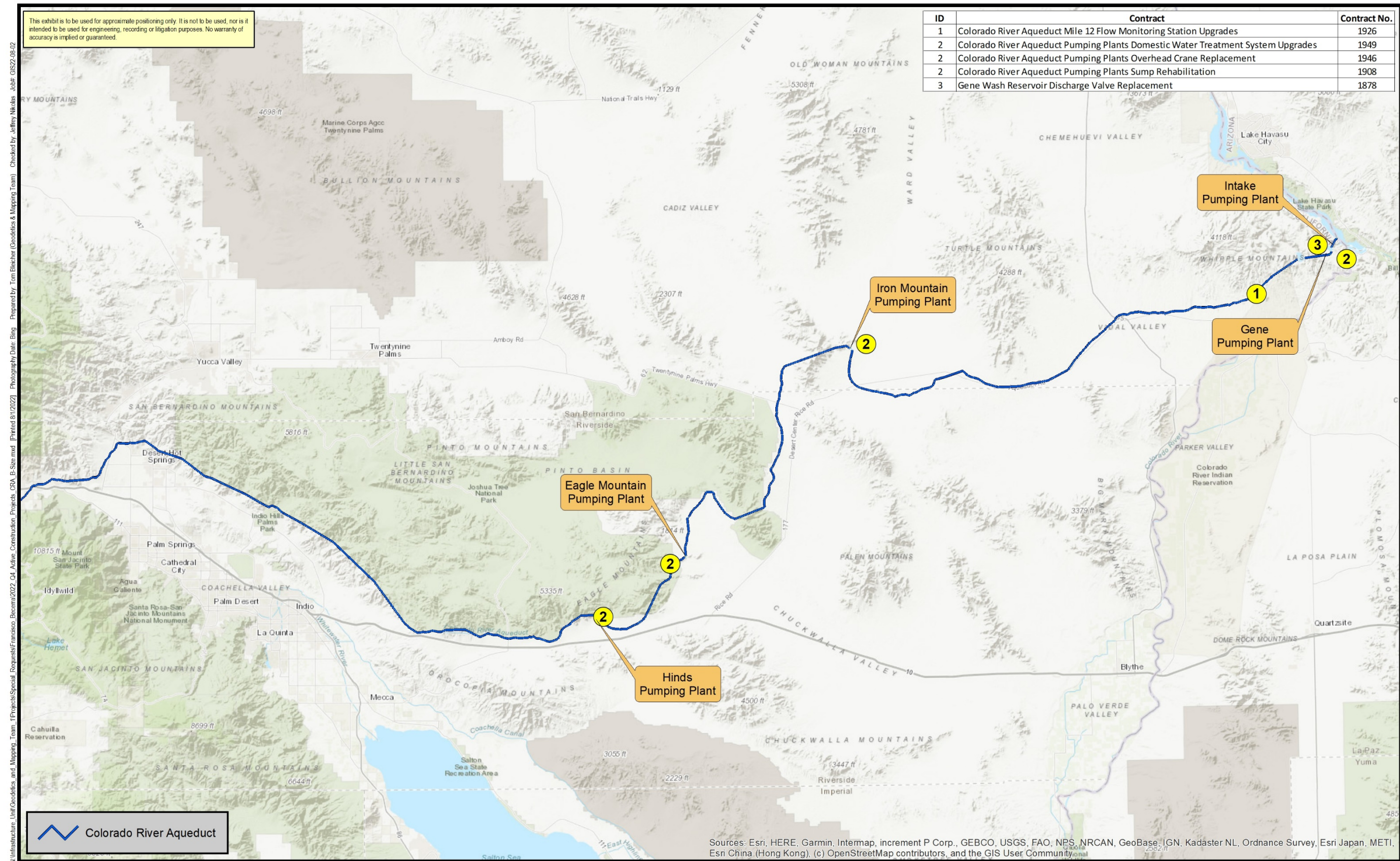


Figure 6: Construction Contracts - Colorado River Aqueduct

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or \$250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In addition, the General Manager is authorized to execute change orders on procurement contracts in an amount not to exceed \$250,000. In the 4th Quarter, the Board did not authorize any increases to the General Manager's change order authority.

Notices of Completion during 4th Quarter:

The following table shows the three contracts for which Metropolitan accepted the contract as completed during the 4th Quarter of FY 2021/22 and filed a Notice of Completion (NOC) with the county where the work was performed. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor.

Table 9: Notices of Completion Filed This Quarter

Contract No.	Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1878	Gene Wash Reservoir Discharge Valve Replacement	May 2022	\$5,316,900	\$5,375,921	\$59,021	1.1%
1914	Joseph Jensen Water Treatment Plant Electrical Upgrade - Stage 2	June 2022	\$14,784,000	\$15,436,467	\$652,467	4.4%
1945	Lake Mathews IT Disaster Recovery Facility Upgrades	May 2022	\$448,900	\$448,900	\$0	0%
Totals:			\$20,549,800			

For the 4th Quarter, the total bid amount of the completed contract was approximately \$20.6 million. The final contract costs can differ from the original bid amount due to change orders and actual costs incurred on unit price or other various bid items. The rolling average of change orders on completed contracts during the preceding 12-month period (July 2021 through June 2022) is 3.28 percent²².

²² Original amount of contracts completed (Jul. 2021 through Jun. 2022)	=	\$84,240,440
Change orders for completed contracts (Jul. 2021 through Jun. 2022)	=	\$2,767,041
Change order percentage for (Jul. 2021 through Jun. 2022)	=	3.28%

Contracts Awarded by the Board during 4th Quarter:

During the period of April through June 2022, eight construction contracts totaling \$156,112,960 were awarded by the Board.

Table 10: Construction and Procurement Contracts Awarded This Quarter

Construction Contracts	
La Verne Shops Building Completion - Stage 5	
Contract Number	1885
Contractor	Woodcliff Corporation
Amount	\$18,930,000
Second Lower Feeder PCCP Rehabilitation - Reach 3A	
Contract Number	1903
Contractor	J.F. Shea Construction, Inc.
Amount	\$11,884,700
Orange County Feeder Relining - Reach 3	
Contract Number	1961
Contractor	Spiniello Infrastructure West, Inc.
Amount	\$17,226,250
Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	
Contract Number	1966
Contractor	Blois Construction, Inc.
Amount	\$3,143,592
Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	
Contract Number	1982
Contractor	J.F. Shea Construction, Inc.
Amount	\$93,840,000
Jensen Water Treatment Plant Ozone Power Supply Units Replacement	
Contract Number	2001
Contractor	Leed Electric, Inc.
Amount	\$2,257,897
Weymouth Water Treatment Plant Battery Energy Storage System	
Contract Number	2014
Contractor	Siemens Industry, Inc.
Amount	\$6,176,521

OC-88 Pump Station Chiller Replacement	
Contract Number	2024
Contractor	Mehta Mechanical Co., Inc. dba MMC Inc.
Amount	\$2,654,000

The table on this page lists the 27 ongoing construction contracts through the end of the 4th Quarter. Also, Metropolitan is negotiating a settlement with the contractor on Construction Contract No. 1908 to remove the remaining construction portion of the contract, which was suspended due to Metropolitan's response to COVID-19. As part of the settlement, Metropolitan is procuring materials and equipment from the contractor for a future construction contract.

Table 11: Active Construction Contracts at the End of 4th Quarter

Cont. No.	Contract Title	Contractor	Contract Amount ²³	Earnings Through June 2022	Start Date	Est. Completion Date	Est. Percent Complete	
1	1884	Garvey Reservoir Sodium Hypochlorite Feed System Upgrades	Metro Builders & Engineers Group, Ltd.	\$2,430,457	\$2,379,557	4/9/21	7/22	98%
2	1885	La Verne Shops Building Completion - Stage 5	Woodcliff Corporation, Inc.	\$18,930,000	\$400,000	6/10/22	5/24	2%
3	1886	Joseph Jensen Water Treatment Plant Vehicle Maintenance Building Roof Replacement ²⁴	AME Builders, Inc. dba AME Roofing	\$282,390	\$47,640	11/1/21	7/22	17%
4	1887	Western San Bernardino County Region Erosion Control Improvements - Stage 1	Jeremy Harris Construction, Inc.	\$677,898	\$355,000	4/1/22	11/22	52%
5	1903	Second Lower Feeder PCCP Rehabilitation - Reach 3A	J. F. Shea Construction, Inc.	\$11,884,700	\$240,000	6/6/22	6/23	2%
6	1905	Metropolitan Headquarters Building Improvements ²⁴	Bernards Bros. Inc.	\$50,736,371	\$50,523,668	1/14/19	7/22	99%
7	1908	CRA Pumping Plants – Sump Rehabilitation ²⁵	Michels Corp dba Michels Pipeline Construction	\$27,242,360	\$11,450,270	1/24/19	7/22	42%

²³ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

²⁴ Granting of additional working days to complete construction are being considered.

²⁵ Contract 1908 has exceeded the contract working days and the contractor will be assessed liquidated damages.

Conf. No.	Contract Title	Contractor	Contract Amount ²³	Earnings Through June 2022	Start Date	Est. Completion Date	Est. Percent Complete	
8	1926	CRA Mile 12 Flow Monitoring Station Upgrades	R2 Engineering dba R2Build	\$2,049,058	\$1,594,518	6/16/21	8/22	78%
9	1938	MWD HQ Bldg. Physical Security Improvements ²⁴	Bernards Bros. Inc.	\$5,998,980	\$5,917,636	9/22/20	7/22	99%
10	1944	Lake Mathews Reservoir Wastewater System Replacement	Creative Home dba CHI Construction	\$3,815,000	\$1,403,375	12/13/21	3/23	37%
11	1946	Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement	J.F. Shea Construction, Inc.	\$13,518,670	\$1,058,339	10/14/20	9/23	8%
12	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	\$32,824,000	\$1,886,981	1/20/22	2/25	6%
13	1951	Skinner WTP Cathodic Protection	National Corrosion	\$240,933	\$234,733	12/13/21	7/22	97%
14	1958	Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1	J.F. Shea Construction, Inc.	\$11,499,000	\$5,055,160	1/20/22	6/23	44%
15	1961	Orange County Feeder Relining - Reach 3	Spiniello Infrastructure West, Inc.	\$17,226,250	\$428,000	5/11/22	9/23	2%
16	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	Bernards Bros. Inc.	\$14,165,888	\$7,619,485	9/24/20	1/23	54%
17	1966	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	Blois Construction, Inc.	\$3,143,592	\$0	7/7/22	8/23	0%
18	1970	Garvey Reservoir Drainage and Erosion Improvements - Areas 6, 7, 8, 10, and 11	Kaveh Engineering & Construction, Inc.	\$1,475,719	\$1,421,749	11/20/20	9/22	96%
19	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J. F. Shea Construction, Inc.	\$93,840,000	\$3,815,000	6/10/22	5/25	4%
20	1984	Skinner Water Treatment Plant Facility Area Paving	All American Asphalt	\$2,048,200	\$2,046,950	2/11/22	7/22	99%
21	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	\$9,200,000	\$1,258,727	12/13/21	1/25	14%

Cont. No.	Contract Title	Contractor	Contract Amount ²³	Earnings Through June 2022	Start Date	Est. Completion Date	Est. Percent Complete	
22	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	Ameresco, Inc.	\$11,604,521	\$2,511,652	10/7/21	10/22	22%
23	2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	Leed Electric, Inc.	\$2,257,897	\$0	7/20/22	12/23	0%
24	2013	Lake Mathews PCCP Rehabilitation Valve Storage Building	Facility Builders & Erectors, Inc.	\$4,759,000	\$605,279	3/10/22	8/23	13%
25	2014	Weymouth Plant Battery Energy Storage System	Siemens Industry, Inc.	\$6,176,521	\$0	7/18/22	12/23	0%
26	2024	OC-88 Pump Station Chiller Replacement	Mehta Mechanical Co., Inc. dba MMC Inc.	\$2,654,000	\$70,000	6/6/22	6/23	3%
27	2045	Upper Feeder Santa Ana River Crossing Expansion Joint Replacement	PCL Construction, Inc.	\$1,200,000	\$0	6/28/22	12/22	0%
Total contract value for active construction contracts:			\$351,727,102					

The following table lists the 15 ongoing procurement contracts through the end of the 4th Quarter.

Table 12: Active Procurement Contracts at the End of 4th Quarter

Cont. No.	Contract	Contractor	Contract Amount ²⁶	Earnings Through June 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ²⁷	
1	1851	Furnishing Horizontal Axially Split Centrifugal Pumps for the Greg Avenue Pump Station	Xylem Water Solutions U.S.A., Inc.	\$1,734,103	\$1,651,760	5/16/17	D ²⁸	95%
2	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,380,909	\$2,362,968	9/11/17	D ²⁸	99%
3	1867 ²⁹	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	\$5,066,975	\$2,602,171	12/18/17	12/22	51%
4	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 2	DeZurick, Inc.	\$771,984	\$760,384	12/18/17	D ²⁸	98%
5	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	\$151,870	\$146,970	3/21/18	D ²⁸	97%
6	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$17,157,856	12/24/18	6/23	72%
7	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	\$2,193,356	\$2,156,295	9/17/18	D ²⁸	98%
8	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Litorque	\$3,532,700	\$2,359,406	2/16/19	8/22	67%
9	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	\$1,244,535	\$529,166	5/28/20	7/25	43%
10	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	\$4,141,194	\$2,025,325	3/30/20	8/22	49%

²⁶ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

²⁷ Estimated Percent Complete is based on contract payments and may not reflect actual progress of fabrication. The contract will be 100% complete upon delivery of fabricated items and field services.

²⁸ All items were delivered but contract remains open pending use of manufacturer field services.

²⁹ Contract 1867 includes tariff and work on Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1 per extra work directed in the November 2020 Board Letter, Item 7-1.

Cont. No.	Contract	Contractor	Contract Amount ²⁶	Earnings Through June 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ²⁷	
11	1968	Furnishing Earthquake-Resistant Ductile Iron Pipe for the Casa Loma Siphon Barrel No. 1	Kubota Corporation	\$9,237,782	\$9,021,862	2/12/20	D ²⁸	98%
12	1969	Furnishing Inlet Valve Gearboxes for Skinner Module No. 7	R&B Automation, Inc.	\$224,510	\$207,035	4/29/20	2/24	92%
13	1978	Furnishing Steel Pipe for the Casa Loma Siphon Barrel No. 1	Northwest Pipe Company	\$6,134,208	\$5,860,701	1/16/20	12/23	95%
14	2011	Furnishing Steel Pipe for Etiwanda Pipeline North Relining, Stage 3	Northwest Pipe Company	\$6,044,897	\$5,024,397	12/20/21	8/22	83%
15	PO 206 047	Furnish Equipment to Upgrade the Ozone Control System at the Mills Water Treatment Plant	Royal Industrial Solutions	\$492,440	\$0	12/6/21	9/22	0%
Total contract value for active procurement contracts:			\$67,101,522					

PERFORMANCE METRICS

In order to measure project performance efficiency and to identify areas for continuous improvements, Metropolitan’s Engineering Services Group has established two primary performance metrics for projects that will result in construction activities. These metrics serve as performance targets for Metropolitan staff for both final design and inspection activities. The inspection metric includes fabrication and construction inspection, as well as construction management services.

Separate performance targets have been established for two categories of project size; those with projected construction costs greater than \$3 million, and those with projected construction costs less than \$3 million.

Metropolitan’s **performance metric targets** for the two categories of construction projects are listed below:

Project Category	Final Design, % of Construction	Inspection % of Construction
Projects with Construction Costs > \$3 Million	9% to 12%	9% to 12%
Projects with Construction Costs < \$3 Million	9% to 15%	9% to 15%

Prior to proceeding with final design or construction, budgets are established for design and inspection that best provide a quality and timely product. Efforts are made to optimize staff and consultant hours based on project complexity and location. The calculated values for the design and inspection costs, as a percentage of total construction costs, in almost all cases lie within or below the metric target ranges. In rare cases, the calculated values may exceed the metric target ranges.

Once a project phase is complete, either final design or construction, staff’s performance against these metrics is then calculated and compared to the target metrics. Table 13 and Table 14 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performance for in-house construction projects and minor capital projects are not reported in this section, since the efforts required for final design and inspection are different.

Table 13: Performance Metric Actuals, Projects > \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Battery Energy Storage System at Weymouth Water Treatment Plant	Final Design	\$400,446	\$6,422,521	9-12%	6.2%
Gene Wash Reservoir Discharge Valve Rehabilitation	Inspection	\$704,130	\$6,118,459	9-12%	11.5%
Jensen Ozone PSU & Critical Components Upgrade Stage 1	Final Design	\$598,224	\$7,093,897	9-12%	8.4%
Jensen Water Treatment Electrical Upgrades - Stage 2	Inspection	\$2,703,385	\$18,643,223	9-12%	14.5% ³⁰
La Verne Shops Buildings Completion - Stage 5	Final Design	\$3,538,036	\$22,025,000	9-12%	16.1% ³¹
Orange County Feeder Relining - Reach 3	Final Design	\$2,040,000	\$18,706,250	9-12%	10.9%
Second Lower Feeder PCCP Rehabilitation Reach 3A	Final Design	\$1,980,000	\$17,980,700	9-12%	11%
Upgrades at Three Sepulveda Feeder Structures	Final Design	\$422,774	3,368,592	9-12%	12.6% ³²
Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation	Final Design	\$3,135,000	100,543,000	9-12%	3.1%

³⁰ Inspection costs for Jensen Water Treatment Electrical Upgrades Stage 2 were higher than the target range because shutdowns were re-sequenced to complete construction work on schedule after an earlier work suspension to mitigate COVID-19.

³¹ Final Design costs for La Verne Shops Building Completion – Stage 5 were higher than the target range due to additional design efforts as a result of differing site conditions discovered during the project bidding period, and re-advertisement and bidding. The site inspection identified corroded concrete aggregate spots on the exterior of the concrete tilt-up walls requiring concrete core samples for laboratory testing, and the development of specifications and drawings for the wall repairs.

³² Final Design costs for Upgrades at Three Sepulveda Feeder Structures were higher than the target range because Metropolitan elected to execute the electrical upgrades and the piping modifications under one construction contract to avoid multiple construction activities at the same general location in successive years. Additional design efforts were needed to combine the separate contract documents, which were already underway, into one design package.

Table 14: Performance Metric Actuals, Projects < \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Lake Mathews IT Disaster Recovery Facility Upgrades	Inspection	\$137,578	\$448,900	9-15%	30.6% ³³
OC – 88 Pump Station Chiller Replacement	Final Design	\$255,930	\$2,782,000	9-15%	9.2%

³³ Inspection costs for Lake Mathews IT Disaster Recovery Facility Upgrades were higher than the target range due to longer than anticipated time to complete construction, which required additional inspection. The construction delays were mainly due to the discovery of unforeseen site conditions including encountering unrippable rock during excavation and longer than anticipated time to receive key equipment such as fire suppression and fire alarm systems due to supply chain issues caused by the COVID-19 pandemic.

SERVICE CONNECTIONS AND RELOCATIONS

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period (April through June 2022).

Relocations

No new relocation agreements involving an amount in excess of \$100,000 were approved under the authority of Section 8122(c) during the reporting period.

PROJECTS EXPENSED TO OVERHEAD

There are no expensed projects to report during the fourth quarter of fiscal year 2021/22 (April through June 2022).

PROGRAM/APPROPRIATION STATUS

The following table provides the program and appropriation level budget versus cost-to-date and biennium planned expenditures versus actuals-to-date.

Table 15: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Colorado River Aqueduct Reliability Program	Total	\$473,498	\$428,385	\$107,370	\$88,606
Cabazon Radial Gate Facility Improvements	15320	\$1,016	\$705	\$0	\$79
White Water Siphon Protection ^{34,35}	15341	\$15,585	\$17,331	\$0	\$2,841
CRA - Conveyance Reliability	15373	\$117,828	\$116,377	\$17,205	\$8,879
CRA Pumping Plant Reliability Program	15374	\$24,467	\$24,003	\$0	\$14
CRA - Electrical/Power Systems Reliability	15384	\$56,515	\$48,490	\$7,477	\$7,651
CRA – Discharge Containment	15385	\$8,129	\$7,975	\$0	\$396
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$134,194	\$119,472	\$39,102	\$24,689
CRA Main Pump Reliability	15481	\$65,730	\$53,058	\$28,296	\$25,435
CRA - Reliability for FY2012/13 through FY2017/18	15483	\$42,127	\$35,881	\$15,279	\$14,753
CRA - Reliability for FY2018/19 through FY2023/24	15507	\$7,907	\$5,094	\$10	\$3,869

³⁴ Approximately \$2.85 million reimbursement from Federal Emergency Management Agency (FEMA) for construction of Whitewater Erosion Protection Structure Rehabilitation was credited in Q4 of FY 2020/21. The credited work was completed prior to the current biennium and has been reversed in this table to account all capital work performed in the current biennium.

³⁵ White Water Siphon Protection (Appropriation No. 15341) has exceeded its authorized budget during the 4th Quarter of FY 2021/22. This variance was rectified in August 2022.

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Cost Efficiency & Productivity Program	Total	\$217,535	\$183,536	\$15,505	\$13,070
DVL Recreation Facilities ³⁶	15334	\$87,104	\$63,953	\$2,725	\$32
Power Reliability and Energy Conservation	15391	\$54,795	\$52,842	\$0	\$0
Information Technology System - Business, Finance, and HR	15411	\$22,468	\$22,458	\$1,320	\$118
Yorba Linda Power Plant Modifications	15446	\$17,125	\$17,092	\$30	\$79
Business Operations Improvement	15484	\$15,646	\$10,238	\$8,087	\$3,552
Project Controls and Reporting System	15490	\$6,440	\$6,302	\$0	\$348
Enterprise Content Management	15500	\$3,600	\$3,595	\$93	\$1,994
DVL Recreation Rehabilitation & Refurbishment	15515	\$1,030	\$913	\$3,250	\$803
Energy Sustainability Improvements	15521	\$9,326	\$6,145	\$0	\$6,145
Dams and Reservoirs Reliability Program	Total	\$76,454	\$68,988	\$18,200	\$7,800
Reservoir Cover and Replacement	15417	\$65,214	\$59,368	\$11,720	\$6,853
Dam Rehabilitation & Safety Improvements	15419	\$11,240	\$9,619	\$6,480	\$947
Distribution System Reliability Program	Total	\$385,784	\$368,128	\$67,100	\$81,538
Conveyance and Distribution System - Rehabilitation	15377	\$104,486	\$101,744	\$16,003	\$8,302
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12 ³⁷	15441	\$112,137	\$115,488	\$5,567	\$11,972
Hydroelectric Power Plant Improvements	15458	\$20,403	\$17,276	\$72	\$2,572

³⁶ Approximately \$107K was credited in Q4 of FY 2020/21 and \$4.5 million was credited in Q2 of FY 2021/22 from the sales of surplus DVL properties per the November 2005 Board Letter, Item 7-3 and the March 2020 Board Letters, Item 8-2. These credits were reversed in this table to account for all capital work performed in the current biennium.

³⁷ Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12 (Appropriation No. 15441) has exceeded its authorized budget during the 4th Quarter of FY 2021/22. This variance was rectified in August 2022.

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$124,638	\$113,653	\$31,776	\$42,772
Pipeline Rehabilitation and Replacement	15482	\$1,143	\$1,033	\$0	\$829
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$22,927	\$16,351	\$12,862	\$12,507
District Housing & Property Improvements Program	Total	\$10,607	\$6,550	\$11,000	\$5,621
Employee Village Enhancement	15513	\$10,607	\$6,550	\$11,000	\$5,621
Minor Capital Projects Program	Total	\$53,500	\$32,009	\$9,200	\$12,940
Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16	15489	\$8,000	\$6,709	\$0	\$16
Capital Program for Projects Costing Less Than \$250,000 for FY2016/17 through FY2017/18	15498	\$10,000	\$7,172	\$2,166	\$413
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$15,500	\$11,424	\$2,004	\$5,809
Capital Program for Projects Costing Less Than \$400,000 for FY2020/21 through FY2021/22	15518	\$20,000	\$6,703	\$5,030	\$6,703
Prestressed Concrete Cylinder Pipe Rehabilitation Program	Total	\$304,327	\$268,750	\$53,860	\$48,500
PCCP Rehabilitation and Replacement	15471	\$24,243	\$22,673	\$2,400	\$2,216
Sepulveda Feeder PCCP Rehabilitation	15496	\$30,525	\$27,923	\$875	\$4,897
Second Lower Feeder PCCP Rehabilitation ³⁸	15497	\$234,427	\$207,448	\$48,200	\$33,818
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$15,132	\$10,706	\$2,385	\$7,569

³⁸ Approximately \$220K tariff refund from Northwest Pipe Company was credited in Q3 of FY 2021/22 for Contract No. 1940 - Second Lower Feeder PCCP Rehabilitation – Reach 4. Approximately \$738K tariff refund from Northwest Pipe Company and \$124K permit deposit refund from the City of Carson were credited in Q4 of FY 2021/22 for Contract No. 1902 - Second Lower Feeder PCCP Rehabilitation – Reach 2. These credits were reversed in this table as the tariff payments and permit deposit were made prior to the current biennium.

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Regional Recycled Water Supply Program	Total	\$22,850	\$21,300	\$210	\$372
Demonstration-Scale Recycled Water Treatment Plant ³⁹	15493	\$22,850	\$21,300	\$210	\$372
Right of Way & Infrastructure Protection Program	Total	\$30,385	\$27,060	\$8,115	\$4,081
Right of Way & Infrastructure Protection	15474	\$30,385	\$27,060	\$8,115	\$4,081
System Flexibility/Supply Reliability Program	Total	\$667,513	\$641,548	\$38,400	\$25,406
Hayfield and Lake Perris Groundwater Recovery	15402	\$1,500	\$1,113	\$0	\$256
Perris Valley Pipeline	15425	\$133,500	\$131,117	\$27,752	\$2,931
Water Delivery System Improvements	15488	\$71,224	\$69,605	\$10,648	\$20,116
Verbena Property Acquisition	15492	\$264,000	\$261,947	\$0	\$1,469
Delta Wetlands Properties (Delta Islands)	15494	\$197,289	\$177,765	\$0	\$633
System Reliability Program	Total	\$366,338	\$306,931	\$97,400	\$81,302
Information Technology System - Infrastructure	15376	\$51,306	\$47,718	\$481	\$2,004
Information Technology System - Security	15378	\$12,351	\$10,815	\$3,930	\$2,583
La Verne Shop Facilities Upgrade ⁴⁰	15395	\$47,087	\$47,319	\$10,619	\$1,829
Water Operation Control	15467	\$51,654	\$42,082	\$3,888	\$2,762
Union Station Headquarters Improvements	15473	\$98,845	\$86,226	\$31,301	\$37,246
IT Infrastructure Reliability	15487	\$49,271	\$36,793	\$25,006	\$20,100
Operations Support Facilities Improvement	15495	\$25,161	\$19,542	\$8,884	\$2,754

³⁹ \$1 million grant from the California State Water Resources Control Board for the construction of Advanced Water Treatment Demonstration Facility was credited in Q3 of FY 2020/21. The credited work was completed prior to the current biennium and has been reversed in this table to account all capital work performed in the current biennium.

⁴⁰ La Verne Shop Facilities Upgrade (Appropriation No. 15395) has exceeded its authorized budget during the 4th Quarter of FY 2021/22. This variance was rectified in August 2022.

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Metropolitan Security System Enhancements	15499	\$15,910	\$11,052	\$6,692	\$8,294
Infrastructure Reliability Information System	15501	\$5,770	\$2,866	\$3,533	\$1,361
System-Wide Paving & Roof Replacements for FY 2020/21 through FY 2021/22	15516	\$3,791	\$1,594	\$1,498	\$1,447
System-Wide Paving & Roof Replacements for FY2020/21 through FY2023/24	15519	\$1,501	\$918	\$0	\$918
Enterprise Data Analytics	18910	\$3,690	\$5	\$1,567	\$5
Treatment Plant Reliability Program	Total	\$953,426	\$912,490	\$76,160	\$89,261
Chlorine Containment and Handling Facilities	15346	\$162,370	\$160,536	\$0	\$89
Weymouth Water Treatment Plant Improvements	15369	\$190,910	\$188,141	\$6,662	\$6,438
Jensen Water Treatment Plant Improvements	15371	\$47,062	\$46,638	\$43	\$54
Diemer Water Treatment Plant Improvements	15380	\$213,657	\$208,330	\$18,301	\$19,179
Mills Water Treatment Plant Improvements	15381	\$5,525	\$5,277	\$0	\$0
Skinner Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15435	\$3,860	\$2,142	\$0	\$33
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$71,439	\$65,671	\$3,112	\$3,376
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$29,079	\$27,516	\$5,502	\$8,755
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$91,376	\$84,696	\$23,687	\$25,630
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$29,152	\$24,592	\$480	\$5,198
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$77,539	\$76,958	\$6,068	\$11,440

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru June 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18 ⁴¹	15478	\$1,425	\$1,436	\$0	\$429
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$1,094	\$847	\$0	\$394
Skinner Water Treatment Plant Improvements for FY 2012/13 Through FY 2017/18	15485	\$1,990	\$1,729	\$0	\$6
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$8,339	\$7,484	\$0	\$723
Weymouth Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15505	\$685	\$302	\$468	\$79
Jensen Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15508	\$9,872	\$5,206	\$8,971	\$4,884
Diemer Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15510	\$1,461	\$755	\$1,487	\$373
Skinner Water Treatment Plant, Improvements for FY 2020/21 Through FY 2023/24	15512	\$3,961	\$3,637	\$520	\$1,584
Mills Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15520	\$2,631	\$597	\$860	\$597
Water Quality/Oxidation Retrofit Program	Total	\$631,914	\$628,233	\$19	\$329
Diemer Water Treatment Plant Oxidation Retrofit	15389	\$370,192	\$370,024	\$0	\$0
Weymouth Water Treatment Plant Oxidation Retrofit	15392	\$251,482	\$248,594	\$19	\$18
Enhanced Bromate Control	15472	\$10,240	\$9,615	\$0	\$312
Total CIP		\$4,194,130	\$3,893,907	\$502,539	\$458,827

⁴¹ Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18 (Appropriation No. 15478) has exceeded its authorized budget during the 4th Quarter of FY 2021/22. This variance was rectified in August 2022.

Notes on above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 07/26/2022.
- \$0 under **Planned Expenditures** indicate that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods
- Negative actual expenditures indicate the result of cost transfers, write-offs, or credits greater than actual costs for this biennium through the reporting quarter
- Total appropriation amount to date and total cost through June 2022 include land acquisitions for Verbena Property and Delta Wetlands Properties.

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